

WASHINGTON SQUARE REGIONAL CENTER PHASE II IMPLEMENTATION PROGRAM SUMMARY REPORT

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WASHINGTON SQUARE REGIONAL CENTER PHASE II IMPLEMENTATION PROGRAM SUMMARY REPORT

June 29, 2001

CITY OF TIGARD

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1. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

In February 2000, the Tigard City Council approved the Washington Square Regional Center Plan, September 1999 (*WSRC Plan*) and related Comprehensive Plan and Zoning Code amendments, withholding enactment of these policies and standards until a number of transportation, natural resource, stormwater, and parks and open space issues were addressed. The City provided resources and secured grants from the Transportation and Growth Management (TGM) Program and the State Department of Land Conservation and Development (DLCD), of the State of Oregon, to undertake additional technical studies to address these issues. This became the Phase II Implementation process.

This report summarizes the conclusions and recommendations from the Washington Square Regional Center Task Force charged with overseeing the Phase II work, and four Technical Advisory Subcommittees (TASes) that reported to the Task Force and worked closely with City staff and a consultant team led by Spencer & Kupper. Figure 1 shows the Washington Square Regional Center Boundary.

CHARGES FROM THE TIGARD CITY COUNCIL

The Phase II Implementation work effort focused on a number of issues first articulated by the Tigard City Council, and then defined as the work program of the Task Force, TASes and the consultant team. They are:

Transportation

- Advise whether the major transportation improvements identified in the Regional Center Plan are physically feasible, and whether environmental or other permitting issues represent a “fatal flaw” for project implementation.
- Determine whether the proposed Regional Center Plan zoning creates the need for significant additional transportation improvements compared with existing zoning.
- Prepare a transportation demand management strategy for the Regional Center.
- Develop a long-range transportation implementation program that addresses public policy, financial resources and responsibilities, and short-term priorities.

Natural Resources

- Map and confirm the hydrological characteristics (wetlands and fish habitat) of the Fanno and Ash Creek Watersheds within the Regional Center.

Compile policies and standards for these watersheds related to development impacts, including the extent that parks and open spaces activities can exist within the 100-year floodplain area.

- Recommend modifications (as necessary) to the City's natural resource regulations.

Stormwater Management

- Assess the stormwater management needs for the Regional Center Plan and a recommended approach for storm water management.
- Develop a long-term funding strategy for storm water management.

Greenbelt, Parks & Open Space

- Confirm the parks and open space needs for the Regional Center Plan and a recommended approach for identifying, acquiring, improving and maintaining parks and open space in the area.
- Develop a long-term funding strategy for parks/open space.

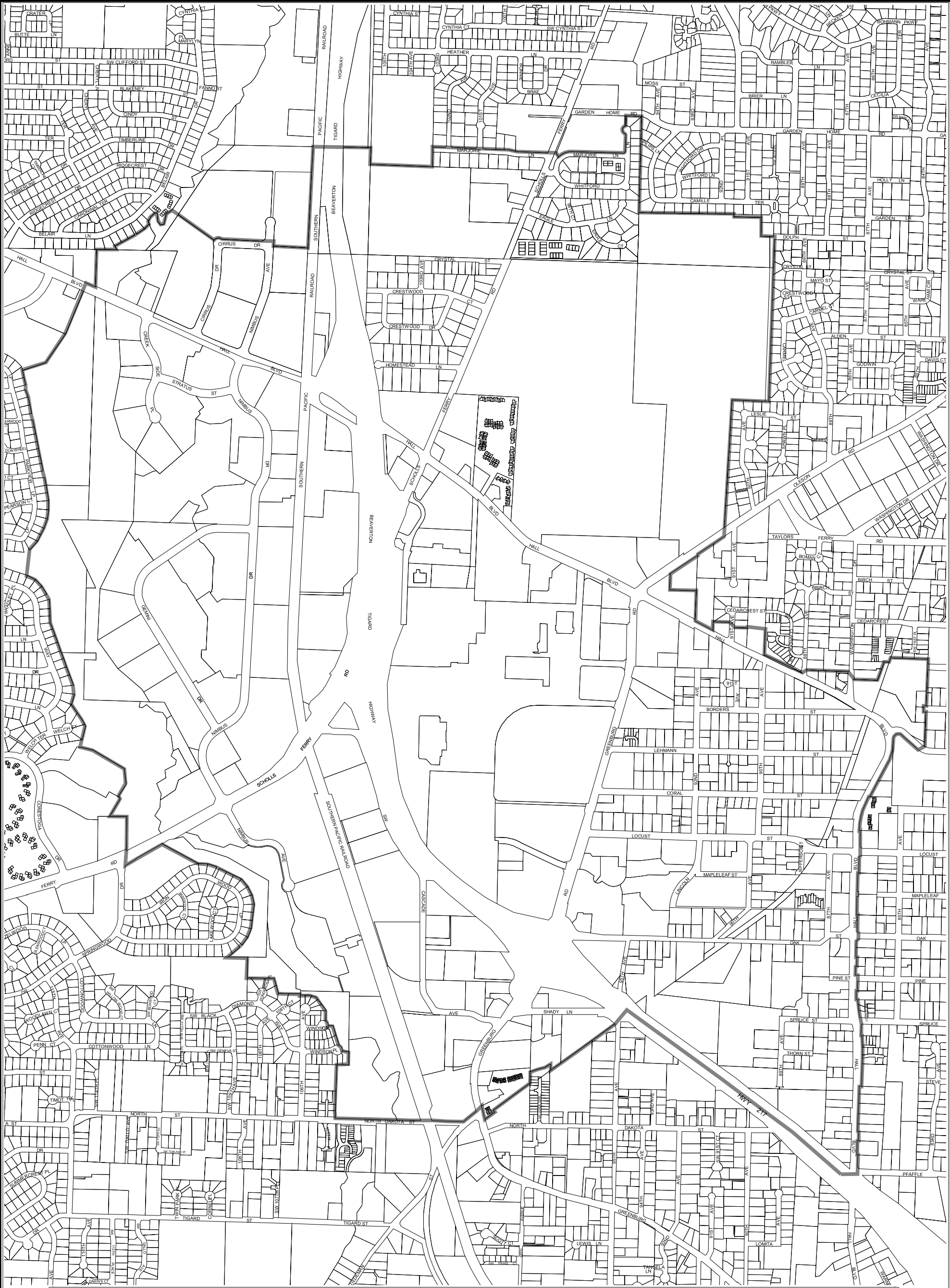
This report is organized to address each of these charges. Sections on transportation, natural resources, stormwater management and parks and open spaces summarize the technical and policy analysis undertaken, identify the major conclusions resulting from this work, and include recommendations for further action. A separate section is devoted to an overall financial strategy that identifies transportation and infrastructure improvements needed to achieve the *WSRC Plan*, and short and long-term recommendations to fund these improvements.

The primary technical reports and memoranda prepared during this Phase II work effort are appropriately referenced in each section and published in a separate document.

FINDINGS, CONCLUSIONS AND OVERALL RECOMMENDATIONS

The findings and conclusions are based on the work of the Task Force, Technical Subcommittees, staff and consulting team, and consultation with the public.

- The results of the engineering and environmental analysis show that all of the transportation recommendations from the *WSRC Plan* can be implemented; no project is fatally flawed.
- A comparison of the traffic trip generation potential of current zoning within the Regional Center to that proposed in the *WSRC Plan* shows very similar future peak hour trips. The transportation system required to serve the *WSRC Plan* is the same as that required to serve the area under current zoning.
- A long-term transportation implementation program is described later in this report, including a transportation demand management strategy. The recommended financing strategy produces sufficient revenues over a 20-year period to implement the improvement program.



City of Tigard's Geographic Information System

Figure 1
Washington Square Regional Center
Study Area Boundary



13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171

0 400 800 1200 Feet

1"= 900 feet



Wsbn01.shp

This map was derived from several data-sources.
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- Detailed field reconnaissance was undertaken and existing vegetative communities and wetlands within the Regional Center were mapped. It is recommended that the Tigard Wetlands and Stream Corridors Map be amended to reflect this work.
- Current federal, state and local regulations and impact review procedures applicable to public and private developments within the Regional Center protect the identified natural resource areas. Existing regulations and any new regulations protecting natural resources take precedence over any local zoning designations, existing or proposed.
- Proposed zoning designations that apply to resource areas do not in and of themselves threaten natural resource values or potentially cause environmental impacts any more or less significantly, compared to existing or less intensive zoning.
- Modifications to the City of Tigard's development standards that apply to sites that include natural resource areas along Ash and Fanno Creeks to minimize environmental impacts are recommended. Applicable development standards include waiving minimum FAR and residential density standards, adjusting building setbacks, and others.
- The results of an assessment of existing and future flooding and water quality needs within the Regional Center show that existing stormwater facilities are inadequate and that identified regional stormwater improvements are unfunded.
- A long-term stormwater management program is described later in this report. A financing strategy that produces sufficient revenues over a 20-year period to implement the improvement program is recommended.
- A greenbelt, parks and open spaces concept plan that refines the proposals made in the *WSRC Plan* is recommended.
- A long-term greenbelt, parks and open spaces implementation program is described later in this report. A financing strategy that produces sufficient revenues over a 20-year period to implement the improvement program is recommended.
- All elements of the greenbelt, parks and open spaces concept plan are feasible.

FINANCIAL STRATEGY SUMMARY AND IMPLEMENTATION RECOMMENDATIONS

The Washington Square Regional Center is second only to the Portland Central City in terms of improvement needs and concentration of jobs and private investment. Due to years of neglect, many of the recommended transportation and other infrastructure improvements described in the *WSRC Plan* and summarized in this report are necessary to address existing needs and deficiencies, not just the impacts caused by growth.

The financing strategy approved by the Task Force identifies more than \$160 million in transportation, stormwater, parks and open space improvements needed over the next 20 years to support existing and anticipated businesses and residences in the area and to preserve its livability. A summary of the improvements and costs are:

| | |
|---|----------------------------|
| Unfunded Transportation | \$115.7-121.7 million |
| Stormwater/Natural Resource | \$15.2-18.0 million |
| Greenway, Parks and Open Space | <u>\$13.1-20.9 million</u> |
| Total Needed Improvements (Over 20 years) | \$144.0- 160.6 million |

The financing strategy is described in detail for each of these major improvements. Based on the analysis of revenue from the variety of sources that can be expected, adequate resources will be available during the next 20 years to fund the public improvements necessary to implement the *WSRC Plan*. The primary elements of the financing strategy are:

- Aggressively pursue transportation funding, including the Highway Trust Fund, state and local sources, and Metro's Metropolitan Transportation Improvement Program (MTIP).
- Establish priorities for disbursement so that locally generated fees from existing businesses and residents and new development activity within the Regional Center are allocated to the transportation and infrastructure needs within the Regional Center.
- Pursue the formation of local improvement district(s) (LIDs) where existing businesses and residents benefit directly from improvements to existing transportation and stormwater facilities, or relatively modest new improvements that benefit multiple property owners are needed.
- For specific improvements, aggressively pursue regional, state, and national grants and funding programs and dedications, donations and contributions from the private sector.
- Seriously consider the formation of an urban renewal district for the Regional Center as a local funding source for major transportation, stormwater, resource enhancement and parks and open space improvements that benefit the entire area. Based on the growth projections utilized for the *Washington Square Regional Center Plan*, approximately \$92-162 million in accumulated urban renewal revenues can be available for activities within the Regional Center over a 20-year period.

An important recommendation of the financial strategy is the creation of this new urban renewal district to include areas within the City of Tigard, City of Beaverton, and unincorporated Washington County. This will assure that the entire Regional Center is eligible for urban renewal investments and provide an economic development focus for the Regional Center itself. Figure 2 shows the political boundaries within the Washington Square Regional Center.

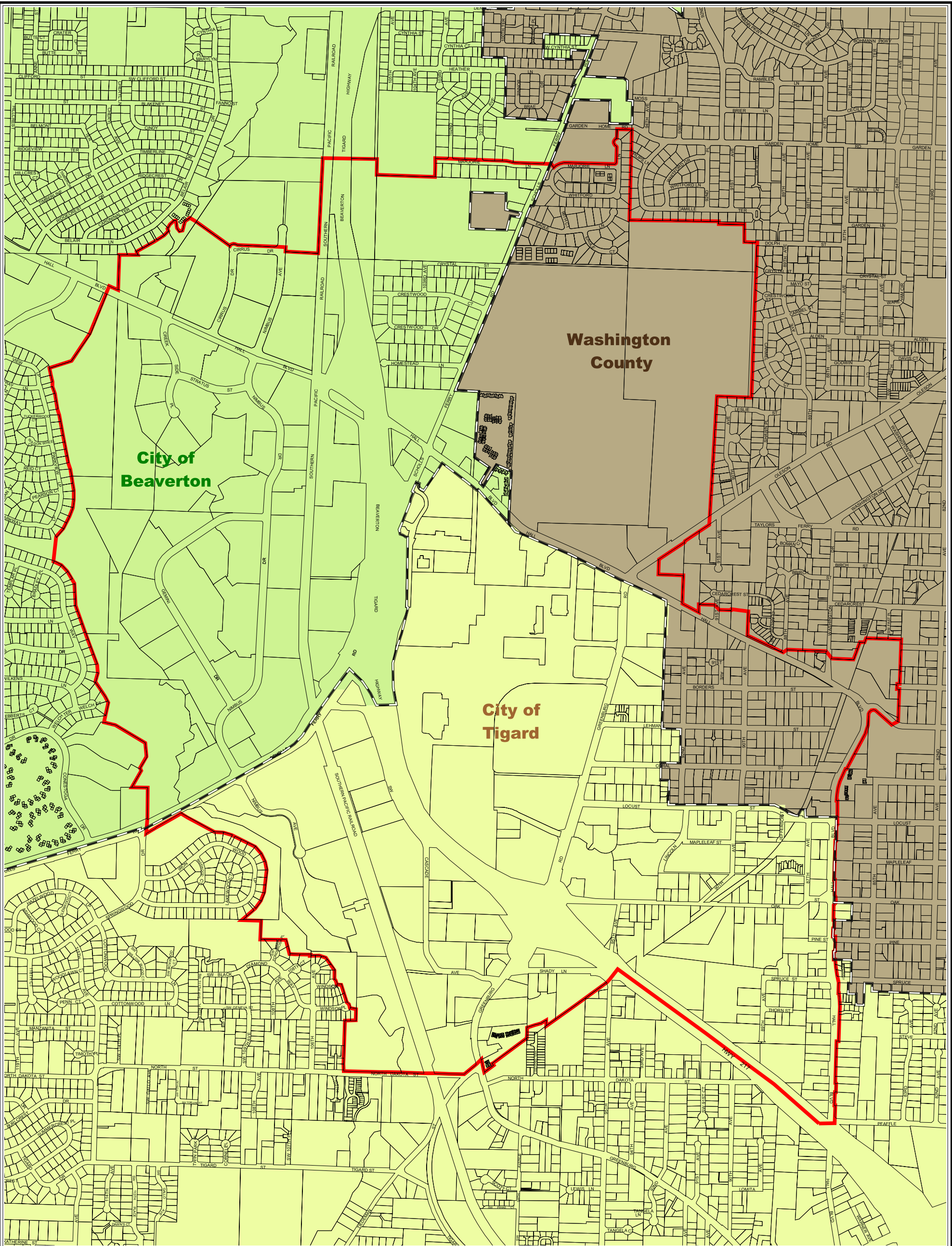


Figure 2
Washington Square Regional Center
POLITICAL BOUNDARIES



City of Tigard
13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171
Community Development

0 400 800 1200 Feet
1"= 900 feet



- Legend**
- Study Area
 - Jurisdictional Boundaries (line)
 - Beaverton
 - Tigard
 - Washington County

This map was derived from several data-sources. The City can not be held responsible for any errors. Therefore, there are no warranties for this product.

Plot date: Oct 13, 2000

It also is recommended that an Economic Improvement District (EID) be formed for the entire Regional Center. An EID will involve participation and contributions from businesses throughout the area and will provide funding for overall management, coordination and advocacy for businesses and residents within the Regional Center.

2. PUBLIC AND AGENCY INVOLVEMENT PROCESS

The purpose of this Public and Agency Involvement Process was to insure that all stakeholders were involved early and throughout this project and that relevant issues were discussed and resolved to the extent possible. Interested individuals and groups were included on the project's mailing list and notified of meetings, events and updates on work progress. A summary of specific elements follows.

TECHNICAL ADVISORY SUBCOMMITTEES (TASes)

A creative addition to this project not present in Phase I consisted of four Technical Advisory Subcommittees (TASes), covering the subjects of natural resources; parks and open spaces; stormwater; and transportation. At the Tigard City Council meeting in January 2000 the Regional Plan was approved; these issues were noted as expressly in need of additional study. TASes were comprised of about 12-15 members: those from the Task Force and the public who indicated an interest in the subject and representatives from appropriate jurisdictions and agencies. The City invited community members to participate through its citizen involvement and outreach channels. Each TAS met at least four times between March and June with a consultant team member and staff to provide input on work program elements. The meetings were facilitated by trained volunteers. TAS findings were presented to the Task Force at strategic points in the study, with the understanding that the Task Force would make the final recommendations.

WASHINGTON SQUARE REGIONAL CENTER PLAN TASK FORCE

All members of the original Washington Square Regional Center Plan Task Force were invited to participate once more in this project. Additional representatives for individual interests who were not able to continue were recruited. The Task Force for this project consisted of 25 members representing neighborhoods, schools, business and property owners, state and local governments, and interest groups. (Please refer to the title page of this document for a complete list of Task Force members.)

The charge of the Task Force was to review the work of the Technical Advisory Subcommittees (TASes) and participate if they chose; provide guidance to staff, consultants and the TASes on major policy issues; give input into public events and other outreach activities; and agree upon and make final recommendations on implementation actions to the Tigard City Council.

The Task Force held six open meetings between December 14, 2000, and July 25, 2001. The agenda for each meeting related to the technical and TAS timetable. Members received information generated by the TASes and provided comments and insight that were taken into account as the project proceeded. Every effort was made to reach consensus on issues of concern.

PUBLIC EVENTS

Two public events were held during the process to provide an opportunity for the general public to gain information about the project and provide input at key steps in the planning process. The first was held on April 4, 2001, midway through the project. Attendees participated in an open house and work sessions with the consultants in which they discussed the four issues being discussed by the TASes: natural resources; parks and open spaces; stormwater; and transportation. Their verbal and written comments were considered as the project progressed.

The second event was on June 5, 2001, near the end of the project, to present components of the draft Plan. The four topic areas listed above were consolidated into three discussion groups (storm water/ development, transportation/ environment, and parks and open space). Consultants presented a more complete picture of the plan and its interrelated components to groups of attendees.

Both events were held at the Metzger Park Hall from 5 to 8 p.m., and were attended by approximately 40 people each time.

Both events were advertised through flyers in neighborhood gathering places; the City newsletter, Cityscape; and local newspapers. The TASes and the Task Force carefully considered the public input from these events when making their recommendations.

Written summaries of all Task Force and TAS meetings, as well as the two public events are included in the appendix to this report.

3. TRANSPORTATION

ENGINEERING AND ENVIRONMENTAL “FATAL FLAW” ANALYSIS

The charge to “advise whether the major transportation improvements identified in the Regional Center Plan are physically feasible and whether environmental or other permitting issues represent a ‘fatal flaw’ for project implementation” is addressed specifically in two reports: Project Recommendations, Evaluation and Implementation, Memorandum, Kittelson & Associates, May 23, 2001, and Impact and Feasibility Analysis Technical Report for Natural Resources, Mason Bruce & Girard, Inc. May 16, 2001.

The results of the feasibility analysis show that from a transportation perspective all of the recommendations from the *WSRC Plan* can be implemented; no project is fatally flawed.

The recommended *WSRC Plan* calls for a comprehensive multi-modal transportation system for the Washington Square Regional Center. With full implementation, there would be improvements in regional connections to and from the area (i.e., commuter rail, transit center improvements, Highway 217) and within the area (i.e., Nimbus overcrossing connecting the Mall and the Nimbus Business Park, pedestrian facilities along and across major roadways, and recreational pedestrian and bicycle facilities surrounding the area). The transportation plan has a holistic perspective, providing regional connections for regional travelers, local connections for local travelers, and collector level connections to provide access for people traveling between the regional and local transportation system (e.g., people mover, Locust Street Improvements, Oak Street improvements).

Work conducted by the consultant and the Transportation TAS and verified by the Task Force and the public shows that there is substantial support for many of the projects recommended in the *WSRC Plan*:

- Members of the TAS and Task Force strongly recommend planning for and implementing transportation improvements on the Highway 217 corridor. Regional connectivity to and from the area is and will continue to be integral to the economic success of the Regional Center.
- Members of the TAS, the Task Force, City of Beaverton, Tigard and Washington County Staff and Staff at Tri-Met and Metro recognize the opportunity to link the Nimbus Business Park, Commuter Rail, and the Washington Square Mall physically with a structure and subsequently, with a shuttle or People Mover connection.
- Members of the TAS and Task Force strongly recommend planning for and implementing transportation improvements on the Highway 217 corridor. These Committees believe that regional connectivity to and from the area is and will continue to be integral to the economic success of the Regional Center.
- City staff, the TAS and the Task Force view the implementation of the Regional Center plan as an opportunity to improve pedestrian, bicycle and transit connectivity and circulation within the Regional Center Area.

Additional projects in the *WSRC Plan* are not as unanimously accepted:

- The TAS and Task Force agree that widening Hall Boulevard to five lanes from Oleson Road south to Highway 217 is possible. The Task Force endorses an expansion to three lanes while acquiring right of way for a five-lane roadway.
- The TAS and Task Force support the Nimbus-Greenburg connection, but also express concern about the potential environmental impacts associated with this facility. This roadway can be constructed to minimize environmental impacts; depending on its final alignment, it could provide an opportunity for large wetlands mitigation. However, wetland and open space advocates and surrounding neighbors remain concerned.

- The TAS and Task Force support the concept of improving connectivity and circulation opportunities within the Regional Center; however, they are also want to be sure that the improvements do not cause negative traffic impacts to surrounding neighborhoods and businesses. For example, there is concern that improvements on Locust between Hall Boulevard and Greenburg Road and the Locust Overcrossing of Highway 217 could create a neighborhood “cut-through” route. As these facilities are designed, special attention should be given to the potential neighborhood impacts.

Regardless of the project under consideration, the partnerships and working relationships that have developed over the course of this project and the previous *WSRC Plan* should continue. The TAS and Task Force were composed of a diverse membership that worked together for three years to forge consensus on transportation issues in the Regional Center. The City of Tigard should strive to build on this momentum as it continues the implementation of the Regional Center Plan.

The following summarizes the evaluation and results of the feasibility analysis for each of the recommendations. The recommended projects are in two categories: non-auto modes and auto modes and are not in priority order. Figure 3 shows the general location of the major transportation improvements.

Pedestrian, Bicycle and Public Transit Recommendations

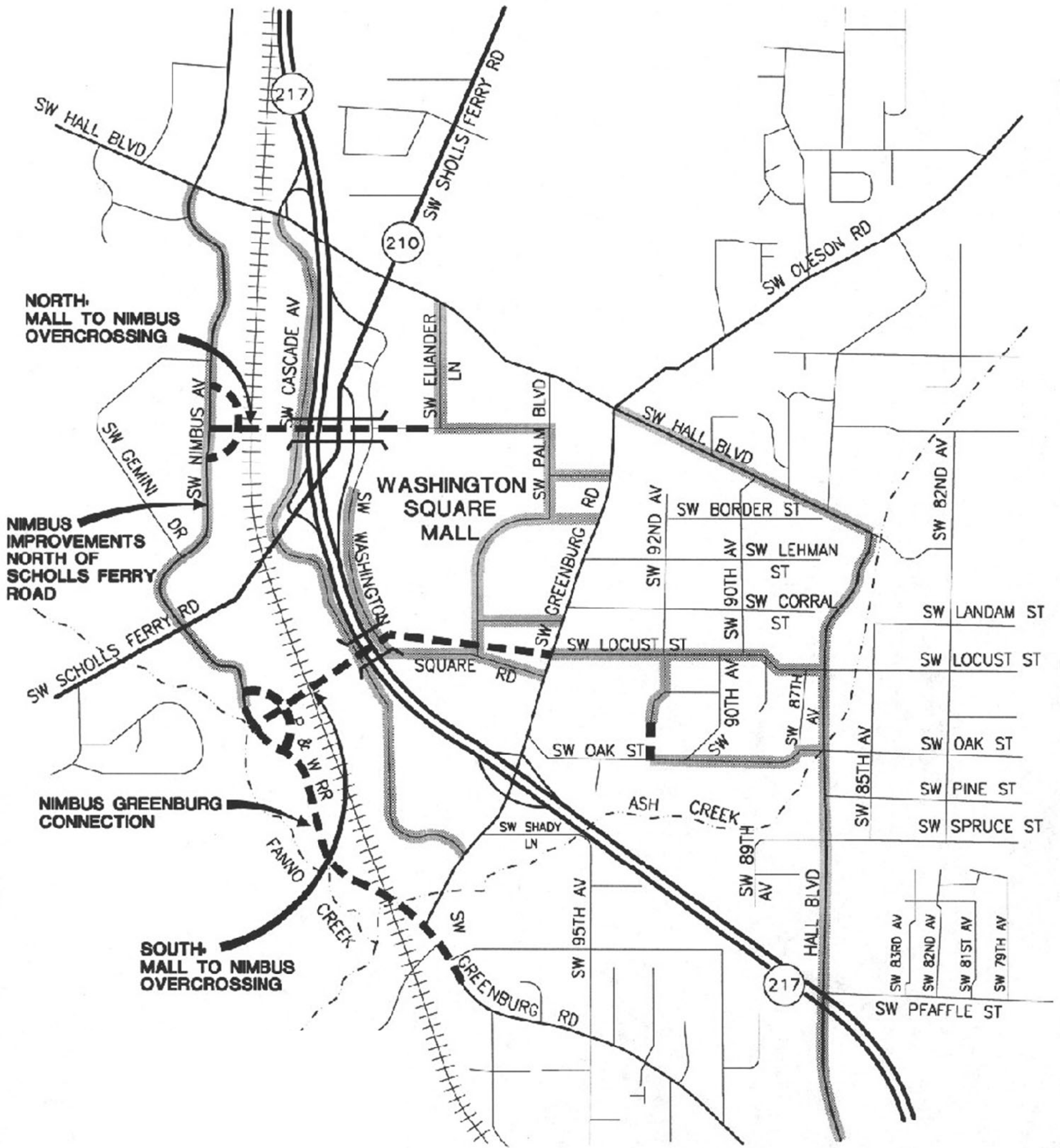
The following is a list of the non-auto related (transit, pedestrian, bicycle, commuter rail, etc) transportation recommendations from the *WSRC Plan*. These are listed in alphabetical, not priority order.

Commuter Rail Service and Station

Washington County is considering the feasibility of commuter rail services from Wilsonville to Beaverton on the existing freight line to the west of Highway 217. The WSRC Task Force supports a commuter rail station in the vicinity of the North: Mall to Nimbus Overcrossing.

Conclusions and Recommendations

- The proposed commuter rail station be permanently located between Scholls Ferry Road and Hall Boulevard in the vicinity of the proposed overcrossing between Nimbus Business Park and the Washington Square Mall.
- A park and ride facility not be constructed in conjunction within the Regional Center or the future commuter rail station.
- Local transit service connecting the commuter rail, Nimbus Business Park, Washington Square Mall and Lincoln Center be developed.



City of Tigard's Geographic Information System

Figure 3.
Washington Square Regional Center
Proposed Transportation Alternatives
(not to scale)



City of Tigard
13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171

LEGEND

- NEW ROADWAY
- UPGRADE EXISTING ROADWAY

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Pedestrian Improvements – SW Greenburg Road

Build pedestrian improvements on SW Greenburg Road between SW Hall Boulevard and Highway 217 to improve pedestrian crossing opportunities and safety.

Conclusions and Recommendations

- As SW Greenburg Road is a Washington County facility, Tigard should coordinate with Washington County to include these projects in the ongoing Washington County Transportation System Plan.
- Pedestrian refuges at non-signalized intersections minimize crossing distances and provide a safe stopping location for pedestrians as they cross Greenburg Road. These improvements have minimal impacts on traffic operations.

Pedestrian Improvements – SW Hall Boulevard

Construct pedestrian crossing refuge (median) on SW Hall Boulevard between SW Pfaffle Street and SW Locust Street to improve safety and pedestrian crossing opportunities.

Conclusions and Recommendations

- As Hall Boulevard is a state facility, Tigard should coordinate with ODOT for early implementation or as part of any future roadway plans.
- Pedestrian refuges at non-signalized intersections minimize crossing distances and provide a safe stopping location for pedestrians. These improvements have minimal impacts on traffic operations.

Pedestrian And Bicycle Improvements - SW Locust Street

Realign SW 90th Avenue across SW Locust Street to provide a four-legged intersection at Locust Street. Construct curb extensions, sidewalks and bicycle lanes to provide improved non-auto accessibility across and along the street.

Conclusions and Recommendations

- Build a four-legged intersection at 90th Avenue/SW Locust Street to provide a focal point for streetscape design; provide an accessible crossing to and from Metzger School.

Pedestrian Access Improvements – Washington Square Mall

Build pedestrian improvements (e.g. sidewalks, landscaping, and connections from parking to the mall and surrounding arterials) in the Washington Square Mall area.

Conclusions and Recommendations

- The TAS and Task Force recommend that roadways within the Mall ultimately should be designed to include sidewalks that connect to the surrounding street system.

Shuttle/People Mover

Develop local area transit service between the Washington Square Mall area, the Nimbus/Cascade districts and Lincoln Center. The service could use the proposed connections across Highway 217. Initially a shuttle bus, in the future this service could be converted to some type of fixed route system.

Conclusions and Recommendations

- Beaverton, Tigard, Tri-Met, Metro, Washington County, the Transportation TAS and the WSRC Task Force agree that significant benefits are associated with connecting the proposed Commuter Rail to the many activity centers in the WSRC.
- There appear to be limited benefits to the Regional Center if the commuter rail is not connected to the Mall and Lincoln Center by some type of people mover system.
- The people mover could initially be shuttle buses (electric or hybrid powered). In the future, the system could be upgraded to a more capital-intensive facility.

Transit Center Improvements

Build capacity and facility improvements (e.g. real time transfer information, lighting, covered connections to the Mall, and additional bus bays) to the existing transit center at the Washington Square Mall.

Conclusions and Recommendations

- As improvements are considered to the Transit Center, Tri-Met, Tigard, Washington County, Beaverton, and the Washington Square Mall should choose the most appropriate future location, capacity and transit center facilities.

Transit System Improvements

The TAS and Task Force support transit routing and frequency improvements in the Regional Center. Tri-Met has provided an outline of potential service improvements and planning needed to implement these improvements, including relocating the Transit Center to provide better connections into the Mall; coordinating park and ride facilities with the future commuter rail service; improving bus stops; and decreasing transit service headways. Tigard, Tri-Met and employers or developers in the district should begin to develop a transit improvement plan.

Travel Demand Management Program

The TAS and Task Force recognize the importance of developing a travel demand management program for the Regional Center area. A key feature of this program is a Transportation Management Association (TMA) that coordinates demand for single occupant vehicles within the Regional Center area; parking management strategies; transit system improvements; and travel demand management programs. The City of Tigard, Beaverton, Washington County, Tri-Met, Metro, ODOT and employers in the area should begin to work together on a detailed plan for the area.

Auto and Roadway Recommendations

The following is a list of the auto and roadway related projects recommendations from *Washington Square Regional Center Plan*. The first seven projects are listed in the priority established by the Transportation TAS and Task Force. The remaining projects are listed in alphabetical order.

Near Term Traffic Operations Improvements

In addition to the long-term projects in the Washington Square Regional Center Framework Plan, the Task Force recommends that small-scale roadway operations improvement projects be implemented in the near future. These improvements can correct existing system deficiencies or provide needed pedestrian, bicycle or transit facilities.

Conclusions and Recommendations

- The following near term improvements that should be considered for implementation as soon as possible:
 - Develop signal timing improvements on Greenburg Road between Highway 217 and the Washington Square Mall.
 - Build a separate eastbound right turn lane from Hall Boulevard to Scholls Ferry Road. This may require Hall Boulevard overcrossing improvements.
 - Construct pedestrian improvements throughout the district.
 - Develop a shuttle system connecting Lincoln Center, Washington Square Mall and Nimbus Business Park.
 - Evaluate and confirm that the southbound Hall Boulevard right turn only lane into the Washington Square Mall at Palmblad Lane should be eliminated. Re-stripe as appropriate.
 - Develop signal timing improvements on Hall Boulevard that allow buses behind schedule to move to the front of the queue and through the signal prior to other traffic (“queue jumping capabilities”).
 - Develop direct access from the Washington Square Mall to Target so that motorists do not have to travel on Hall Boulevard when traveling between the two facilities.

Highway 217

Identify and plan for the implementation of improvements to Highway 217 and its interchanges between Interstate 5 and Highway 26.

Conclusions and Recommendations

- The WSRC Task Force strongly recommends that Highway 217 be identified as a priority for engineering studies, regional funding, and ultimately improvements.
- The economic vitality of the Regional Center could be at risk without people moving capacity improvements to Highway 217 and its interchanges with the surrounding transportation system.
- Interchange improvements to improve pedestrian and bicycle access across Highway 217 also should be developed.

North: Mall to Nimbus Connection

The Washington Square Regional Center Task Force identified this project as the first priority for implementation in the Regional Center area:

- Build a bridge over Highway 217 connecting the Washington Square Mall with the Nimbus Business Center. The bridge is intended to be a facility for local travel within the Regional

Center. It would include a two-lane roadway, bike lanes, sidewalks and facilities for transit.

There are two options for this connection:

- A bridge from the Washington Square Mall extending over Scholls Ferry Road, Highway 217, and the commuter rail tracks, connecting to Nimbus Avenue. As this project is developed, the actual alignment will be identified.
- A new intersection with Scholls Ferry Road, a bridge over Highway 217, the commuter rail tracks connecting to Nimbus Avenue. This option requires re-aligning the existing northbound Highway 217 to the Scholls Ferry Road off-ramp.

Conclusions and Recommendations

- This project because it extends the life of the Highway 217 interchanges by providing an alternative route for motorists traveling from the Nimbus Business Center to the Washington Square Mall.
- It does not preclude most future interchange configurations at Scholls Ferry Road/Highway 217 or Hall Boulevard/Highway 217.
- As this project is developed further, consideration should be given to the overcrossing as a pedestrian/bicycle/transit bridge.
- Right of way is required on the east and west side of Highway 217. On the east side of Highway 217, the structure would provide an opportunity for new land use development at the north side of the Mall.
- The project would be built in one phase. It could be designed to be widened in the future.
- Implementation would result in the loss of a relatively small amount of wetlands (approximately 0.004 ha [0.01 ac]). This filling or alteration of the wetland ditch/swale is considered minimal and would be authorized under the existing Nationwide Permit (NWP) Program administered by the Corps of Engineers (COE), in accordance with Section 404 of the Clean Water Act. The NWP No. 14 (Linear Transportation Crossings) would be applicable to this alternative. The wetland fill also would qualify for a General Authorization for Road Construction by the Oregon Division of State Lands (DSL) under the Oregon Removal/Fill Law.
- Given the existing characteristics of this wetland (i.e. drainage ditch/swale) and the minimal amount of impact, both the COE and DSL may waive the requirement for mitigation for the filling action. Potential mitigation would likely be direct in-kind replacement of a new ditch/swale along the P&WRR right-of-way.
- Given the distance of the proposed alternative alignment to Fanno Creek (approximately 480 m [1570 ft]), the potential for adverse impacts on fisheries resources and habitats within Fanno Creek is likely to be minimal. The minimal impacts may result in a finding of “No Effect” under the Endangered Species Act (ESA), so that formal consultation with National Marine Fisheries Service (NMFS) would not be necessary. Although it is unlikely, formal consultation with NMFS would require the preparation of a Biological Assessment (BA) to document potential impacts to fisheries. The COE cannot authorize the filling of the wetlands without receiving concurrency with the BA’s finding of effect or a Biological Opinion (BO) from NMFS.

- The project would be built in one phase. It could be designed to be widened in the future.
- The project will provide a new connection between the Nimbus Business Center and Washington Square Mall and effectively connect Hall Boulevard west of Highway 217 to the Mall via Nimbus Avenue. Before improvements to the Hall Boulevard/Highway 217 interchange are made, this may become a short-cut route for motorists traveling from west of Highway 217 to the Mall. The bridge is intended to provide a local connection from Nimbus Business park to the Mall (e.g. two-lane roadway including facilities for transit, bicyclists, and pedestrians).
- The design of the facility and the roadway treatments should be sensitive to its intent and the potential that motorists would use it to avoid the Hall Boulevard/Highway 217 interchange.
- Traffic impacts at the existing southbound Progress off-ramp from Highway 217 to Hall Boulevard should be evaluated and coordinated with the Hall Boulevard/Nimbus Avenue. Improvements to this intersection may be necessary. An additional option is to connect the Mall to Scholls Ferry Road with a signalized intersection, build a bridge over Highway 217, and a commuter rail connection to Nimbus Avenue.

Conclusions and Recommendations

- Due to the potential traffic operations impacts to Scholls Ferry Road; and the potential constraints on future Highway 217 interchange improvements, the TAS and Task Force do not support this project.
- This project extends the life of Highway 217 so that local trips from the Nimbus Business Center to the Washington Square Mall can avoid the Hall Boulevard and Scholls Ferry Road interchanges with Highway 217.
- This configuration of the Nimbus crossing requires relocating the northbound Highway 217 to Scholls Ferry Road off-ramp. If built prior to improvements on the Highway 217 corridor, this is likely to preclude future efficient configurations of the Highway 217/Scholls Ferry Road interchange. Once a bridge is constructed, it is expensive to expand or modify it. Therefore, according to the phased implementation and expandability criteria, this project receives a low rating.
- Implementation of this alternative is likely to result in the filling of approximately 0.16 ha (0.37 ac) at two locations. This proposed wetland fill is likely to be authorized by a Nationwide Permit No. 14 (Linear Transportation Crossings) as the fill area is below the permit's 0.20 ha (0.50 ac) limitation for public transportation improvement projects. NWP No. 14 would be authorized by the Corps of Engineers (COE) in accordance with Section 404 of the Clean Water Act. The wetland fill(s) would also qualify for a General Authorization for Road Construction by the Oregon Division of State Lands (DSL) under the Oregon Removal/Fill Law.
- Given the distance of the proposed alternative alignment to Fanno Creek (approximately 480 m [1570 ft]), the potential for adverse impacts on fisheries resources and habitats within Fanno Creek would likely be minimal. These minimal impacts may result in a finding of "No Effect" under Endangered Species Act (ESA), which means that formal consultation with National Marine Fisheries Service (NMFS) is not necessary. Preparation of a "No Effect" memorandum could be prepared to show justification for not initiating

consultation with NMFS. Although it is unlikely to occur, formal consultation with NMFS would require the preparation of a Biological Assessment (BA) to document potential impacts to fisheries. The COE is not likely to authorize the filling of the wetlands without receiving concurrency with the BA's finding of effect or a Biological Opinion (BO) from NMFS.

- Relocating the existing northbound Highway 217 to the Scholls Ferry Road off-ramp and adding a new intersection on Scholls Ferry Road would negatively influence traffic on Scholls Ferry Road and Highway 217.

SW Nimbus Avenue

The Washington Square Regional Center Task Force identified this project as the second priority for implementation in the Regional Center area.

Its two components are as follows:

North of Scholls Ferry Road: Modify the existing roadway to a three-lane facility with parking, bike lanes and sidewalks. Potential for streetscape improvements include a solid median with specific turn slots to individual properties.

Nimbus to Greenburg Connection: Extend SW Nimbus Avenue to meet Greenburg Road. This would be a five-lane roadway with bike lanes and sidewalks, but no on-street parking.

North of Scholls Ferry Road

Conclusions and Recommendations

- With the connection to Greenburg Road (and potentially north to Denny Road), this facility would provide increased north-south connectivity on the west side of Highway 217 for local and sub-regional trips.
- This project could be constructed with or without improvements to Highway 217 and not significantly influence the future nature of Highway 217.
- This project would not be built without the connection to Greenburg Road. If connected to the Nimbus-Greenburg connection, it would extend the life of Highway 217 by providing an alternative travel route through the west side of the WSRC.
- Right-of-way along the existing Nimbus Avenue may be required.
- There may be traffic issues at the intersection of Nimbus Avenue with Hall Boulevard. Traffic operations at this intersection would have to be coordinated with the future configuration of the Highway 217/Hall Boulevard interchange.
- This facility could be built as a three-lane facility south of the Locust Street Overcrossing. Future volumes partially dependent on the future capacity of Highway 217.

Nimbus-Greenburg Connection

Conclusions and Recommendations

- The City of Tigard should begin planning for and designing this facility as soon as possible. The potential environmental issues and mitigation opportunities require substantial analysis and federal review.
- Connected to a widened Nimbus, this facility would provide alternate access for motorists on the south and west side of Highway 217. They would no longer have to choose between Hall Boulevard and Highway 217 for north-south access.
- Right-of-way would be required.
- There are environmental impacts associated with building this facility.
- Depending on the design, there are associated wetland, stream, and floodplain mitigation opportunities in the vicinity of the connection with Greenburg Road.
- This alternative has the potential to affect 0.08 ha (0.21 ac) of wetlands at three locations. The wetland impacts would be largely the result of re-aligning SW Nimbus Avenue and building bridge piers within the wetlands adjacent to the P&WRR right-of-way and Ash Creek. For the bridge piers, the wetland fill could be authorized by either a NWP No. 25 (Structural Discharges) or a NWP No. 14 (Linear Transportation Crossings.). The NWP No. 25 authorizes the discharges of concrete or other fill material into tightly sealed forms or cells where the material is used as structural member or footing for a bridge pier (Wetland Training Institute 2000.) The NWP No. 14 authorizes fills up to 0.20 ha (0.5 ac) for public transportation improvement projects. The wetland fill associated with the realignment of SW Nimbus Avenue could be authorized through a NWP No. 14. The NWP would be authorized by the Corps of Engineers (COE) in accordance with Section 404 of the Clean Water Act. The wetland fill(s) would also qualify for a General Authorization for Road Construction by the Oregon Division of State Lands (DSL) under the Oregon Removal/Fill Law.
- Authorization for the wetland fill by the COE through either a NWP No. 25 or a NWP No. 14 constitutes a federal action or “nexus.” This may require consultation with the National Marine Fisheries Service (NMFS) under Section 7 of the Endangered Species Act (ESA) to assess potential impacts to fisheries listed as threatened within Fanno Creek and Ash Creek. Surface runoff from the impacted wetlands drains to Ash Creek via broad drainage swales located along both sides of the P&WRR right-of-way. Stormwater from SW Nimbus Avenue drains to Fanno Creek. Without proper stormwater controls, water quality within Fanno and Ash Creeks could be further degraded. To fully address potential water quality impacts to fisheries, the consultation with NMFS would require the preparation of a BA to document potential impacts to fisheries. The COE is not likely to authorize the filling of the wetlands without receiving concurrency with the BA’s finding of effect or a BO from NMFS.
- Given the extent of wetland impact and the location of these impacts in proximity to Ash Creek, the COE and DSL would likely require mitigation as a condition of permit authorization. Fortunately, there are significant opportunities for mitigation along both Ash and Fanno Creeks. For example, the potential exists that up to 1.1 ha (2.8 ac) of impervious surfaces would be removed and converted to wetlands and floodplain along Ash Creek when the elevated roadway is built over existing commercial buildings. Other

potential mitigation opportunities include creation of existing wetlands; restoration of existing degrading wetlands; and enhancement of existing wetlands along Ash or Fanno Creek. The DSL would likely require at least a 1.5 to 1 replacement ratio. The overall intent of the mitigation requirements established by the COE and DSL is that there would be no net loss of wetland values and functions within the project area.

South: Mall to Nimbus Connection

The Washington Square Regional Center Task Force identified this project as the third priority for implementation in the Regional Center area: build a new bridge from SW Locust St/Greenburg Road, through Washington Square, over Highway 217, terminating at the extended SW Nimbus Avenue south of Scholls Ferry Road. This facility would include bike lanes and sidewalks.

Conclusions and Recommendations

- This facility will improve connectivity between the east and west sides of Highway 217; it is important to avoid or minimize potential negative neighborhood traffic impacts east of Greenburg Road.
- This improvement provides more connectivity benefits and significant congestion relief on Highway 217.
- The location of the intersection of this facility with Greenburg Road will influence traffic volumes on Locust Street east of Greenburg Road.
- The final alignment of the roadway and overcrossing should be designed to minimize negative traffic impacts to the neighborhood adjacent to Locust Street. This facility could be constructed independent of the future form of Highway 217.
- Right-of-way through the Washington Square Mall and on the west side of Highway 217 at the connection back to Nimbus Avenue would have to be acquired.
- To complete the connection from the bridge to Nimbus, it would be necessary to raise a portion of Nimbus Avenue on the west side of Highway 217. Maintaining traffic during construction will be a challenge.
- The intersection of this facility with Greenburg Road influences the extent of neighborhood impacts to Locust Street east of Greenburg Road. As a four-legged intersection with Greenburg Road, there is potential for more cut-through traffic on Locust Street east of Greenburg Road. If the intersection is created opposite the existing Lincoln Center access, this would minimize the potential for neighborhood cut-through traffic; but also would decrease traffic flow and operations on Greenburg Road.
- An alternate potential mitigation to minimize neighborhood cut-through traffic is to prohibit traffic from traveling east and westbound across Greenburg Road on Locust Street.
- As this facility is designed, neighborhood impacts should be considered and balanced with traffic level-of-service (LOS) considerations on Greenburg Road.
- Engineering criteria may require the placement of bridge piers within the wetlands adjacent to the P&WRR right-of-way. This would require the filling of approximately 0.024 ha (0.06 ac) at possibly two locations. In addition, the realignment of SW Nimbus Avenue would result in approximately 0.020 ha (0.05 acre) of wetland fill. For the bridge

piers, the fill could be authorized by either a NWP No. 25 (Structural Discharges) or a NWP No. 14 (Linear Transportation Crossings).

- Given the relatively small size of proposed wetland fill, the Corps of Engineers (COE) and Division of State Lands (DSL) may waive mitigation requirements. In the event that mitigation is required, ample opportunities for mitigation along either Ash Creek or Fanno Creek exists. Potential mitigation opportunities include creation of existing wetlands, restoration of existing degraded wetlands, and enhancement of existing wetlands. The DSL would require at least a 1.5 to 1 replacement ratio. The overall intent of the mitigation requirements established by the COE and DSL would be no net loss of wetland values and functions.

SW Lincoln Street

The Task Force chose this project as the fourth priority: modify Lincoln Street to provide a three-lane section with parking, bike lanes and sidewalks between SW Locust Street and SW Oak Street.

Conclusions and Recommendations

- This improvement would enhance local circulation for motorists and non-auto modes of transportation within the Regional Center.
- It would have no impacts on the future form and function of Highway 217.
- Some right-of-way to complete this connection between Locust and Oak Street is required.

SW Hall Boulevard

The Task Force identified this project as its fifth priority for implementation: first, build a three-lane facility with sidewalks and bike lanes between Oleson Road and Highway 217. If after other project recommendations have been built and it is found that Hall Boulevard still needs to be a five-lane facility, the roadway would be widened again. In the interim, and as possible, the City of Tigard or ODOT would acquire the right-of-way necessary.

As a three or five-lane facility, this project includes a landscaped median with designated left turn pockets that also provide for improved pedestrian crossing opportunities. This is consistent with Metro's Regional Boulevard Designation for Hall Boulevard.

Conclusions and Recommendations

- The roadway should be improved to three lanes with sidewalks, bike lanes and pedestrian refuges. If, after other improvements have been implemented and further capacity is needed, the Task Force recommends that the roadway then be widened to five lanes with sidewalks, bike lanes and pedestrian refuges.
- The surrounding neighborhoods and businesses oppose widening Hall Boulevard to a five-lane section given concern for hundreds of children who walk to school and cross Hall Boulevard and for children and adults who use Metzger Park and small stores on each side of Hall. Many people currently bicycle and walk given the current lane design.
- There is regional support for Hall Boulevard being widened to a five-lane section. This

project is included in the Metro Regional Transportation Plan (RTP).

- Significant right-of-way would have to be acquired to achieve the five-lane cross section. If widened to five-lanes before Highway 217 is improved, some improvement to traffic operations on Highway 217 may be realized.
- Maintenance of traffic as the roadway is widened to five lanes is a challenge.
- The proposed widening of SW Hall Boulevard is likely to require replacement or extension of the existing culvert crossings for Ash Brook and Ash Creek. The extension of the culverts would require work with the channels of both creeks. From a regulatory standpoint, both Ash Brook and Ash Creek are considered “waters of the United States” under Section 404 of the Clean Water Act. As such, any construction below the ordinary high water mark (2-year floodplain elevation) requires authorization from the Corps of Engineers (COE). The proposed culvert replacement can be authorized under a NWP No. 14 (Linear Transportation Crossings). It also would qualify for a General Authorization for Road Construction by the Oregon Division of State Lands (DSL) under the Oregon Removal/Fill Law.
- Historically, both Ash Brook and Ash Creek have been inhabited by steelhead trout and chinook salmon, which are listed as threatened under the Endangered Species Act (ESA). Given the potential for in-water work associated with the culvert replacement and the potential authorization of this work by the COE through a NWP No. 14, consultation may be required with the National Marine Fisheries Service (NMFS) in accordance with Section 7 of ESA. The issuance of a NWP No. 14 by the COE constitutes a federal action or “nexus,” the COE must consult with NMFS on potential impacts to threatened fisheries before the permit is issued. The consultation with NMFS would require the preparation of a BA to fully document potential impacts to fisheries. The Biological Assessment (BA) would have to address direct and indirect construction related impacts as well as the long-term effects on water quality and the loss of riparian habitat. The COE may not authorize the in-water construction work without receiving concurrency with the BA’s finding of effect or a Biological Opinion (BO) from NMFS.
- Mitigation required by NMFS would likely require full streambank stabilization of both Ash Brook and Ash Creek following construction. Replacement of lost riparian vegetation along Ash Creek also would be required. Stormwater originating from SW Hall Boulevard is likely to have to be pre-treated prior to discharge into either Ash Brook or Ash Creek. All new culverts would likely have to be designed and constructed in accordance with ODFW fish passage standards. In-water work would likely have to be conducted during ODFW approved in-water work periods (June 1-September 30) (ODFW 2000).

SW Cascade Avenue

Improve the existing roadway (north and south of Scholls Ferry Road) to three-lane standard with parking, bike lanes and sidewalks. Potential for streetscape improvements include a solid median with specific turn slots to individual properties.

Conclusions and Recommendations

- The City of Beaverton and Tigard should coordinate with property owners to ensure that the proposed streetscape for this facility is consistent with the property owners' needs. The City of Beaverton has indicated that in the past, parking was a priority.

SW Locust Street

Modify between Hall Boulevard and Greenburg Road to include a three-lane section with parking, bike lanes, sidewalks and other streetscape improvements; maintain as a lower speed street.

Conclusions and Recommendations

- Improvements to this roadway should be consistent with the surrounding neighborhood land uses. The street should be planned to carry neighborhood and sub-regional trips at low travel speeds.
- The surrounding neighbors would prefer that this street remain a neighborhood collector.
- There would likely be diversion of traffic onto Oak Street.
- Right-of-way may be required.
- The facility has little influence on the future form and function of Highway 217.

SW Oak Street

Modify the roadway to provide a two-lane section with parking, bike lanes and sidewalk between SW Hall Boulevard and SW Lincoln Street.

Conclusions and Recommendations

- Coordination between Tigard and Washington County is required.
- There is likely to be diversion of traffic onto Locust Street during construction.
- Right-of-way may be required.

Washington Square Internal Roads

Build improvements to existing Washington Square Mall internal circulation roads to meet public street standards, with bike lanes and sidewalks.

Conclusions and Recommendations

- As Tigard does not have jurisdiction over these roadways, the City would either have to acquire the right-of-way, condition the improvements with further Mall development, or obtain cooperation from the property owners.
- The roadways could be modified to public street standards easily.

COMPARISON OF EXISTING AND PROPOSED ZONING, AND TRANSPORTATION IMPLICATIONS

At the conclusion of the Washington Square Regional Center Plan, it was clear that a number of traffic-related questions needed to be addressed in the WSRC Implementation study, including

whether the proposed land use zoning would yield worse traffic conditions than currently experienced. Specifically, a key transportation issue is comparing the trip generation potential in the Regional Center area assuming buildout under current zoning as compared to buildout under the proposed *WSRC Plan* zoning. (Figure 4, *WSRC Plan* zoning.)

Conclusions and Recommendations

The memorandum, *Comparative Evaluation of Study Area Trip Generation*, Technical Memorandum, Kittelson & Associates, Spencer & Kupper, February 20, 2001, concluded:

- Existing traffic congestion in the area will worsen, either under the current zoning or the proposed zoning scenario.
- Significant transportation system improvements are required in the Regional Center area, regardless of the current or proposed zoning.
- At buildout, the proposed *WSRC Plan* land uses will generate the same number of p.m. peak hour trips as would be generated assuming buildout under current zoning.
- The transportation system required to serve the proposed Regional Center land uses are the same as required to serve the area assuming buildout under current zoning conditions.
- By adopting the *WSRC Plan*, the City of Tigard has the opportunity to plan for this growth in a manner consistent with regional policy; in addition, there is greater likelihood of funding.

TRANSPORTATION DEMAND MANAGEMENT STRATEGY

The report, *Washington Square Transportation Demand Management (TDM) Report*, Michael Kodama Planning Consultants, June 25, 2001, describes a framework for the development, refinement and adoption of a TDM program that would complement the transportation improvements identified in the Washington Square Regional Center Framework Plan.

TDM strategies focus on reducing single occupant vehicle trips and encouraging use of alternative modes. They seek to modify travel behavior to make better use of transportation resources and infrastructure. The *1999 WSRC Plan* identifies the following potential TDM strategies:

- Free monthly or daily bus passes for employees
- Parking management
- Designated and preferential carpool parking for employees
- Shuttle to nearby park and ride lots
- Employee shuttle
- People mover system
- Flexible or staggered work hours
- Guaranteed ride home program
- TMA development

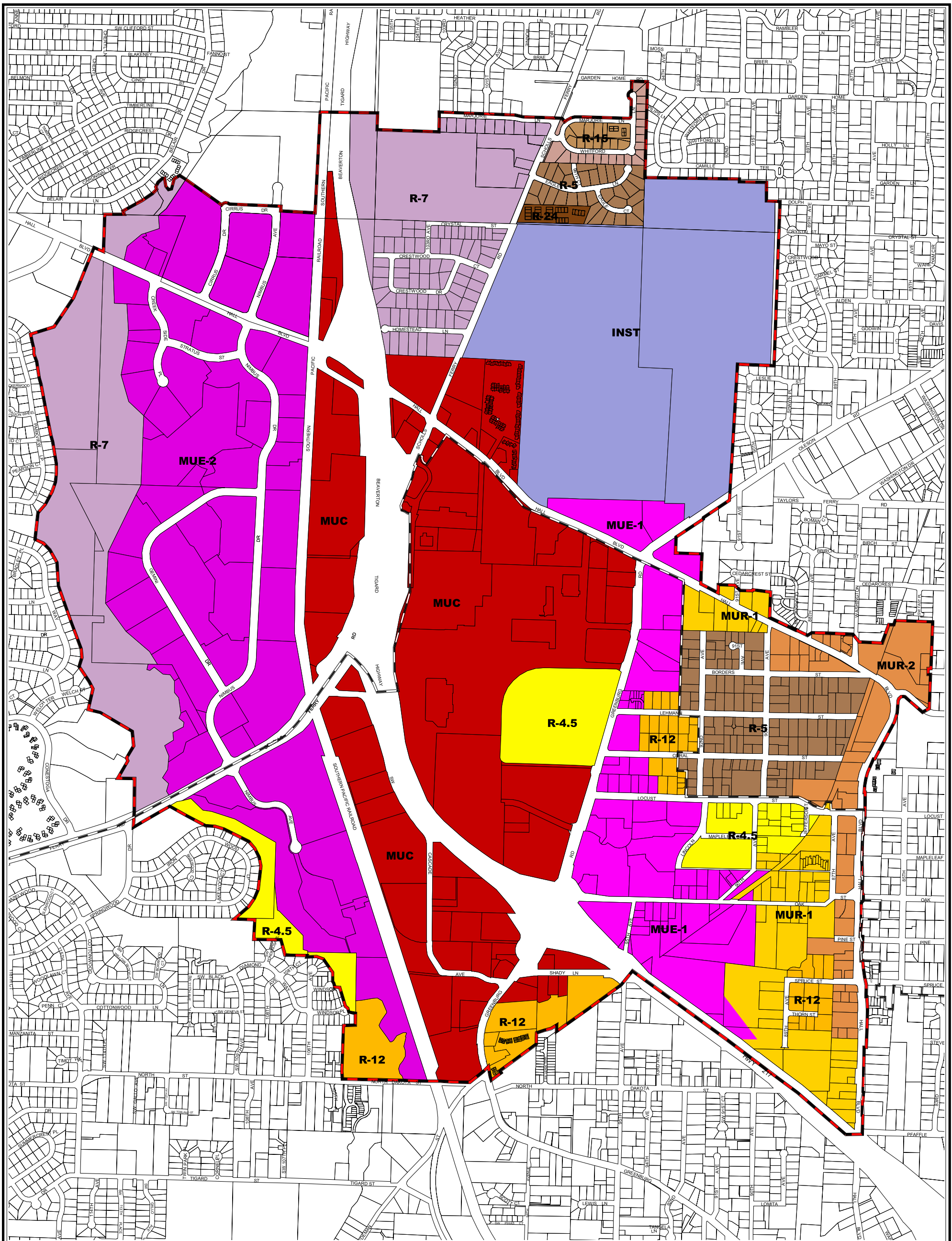


Figure 4
Washington Square Regional Center
ADOPTED ZONING DESIGNATIONS



City of Tigard
13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171
Community Development

0 400 800 1200 Feet
1" = 900 feet



- Legend**
- Study Area
 - Tigard City Limits
 - Regional Center Zoning
 - INST Wash
 - MUE-2
 - MUE-1
 - R-7 Beav
 - MUC
 - R-24 Wash
 - R-5 Wash
 - R-15 Wash
 - MUR-2
 - MUR-1
 - R-12 Tig
 - MUR-1
 - R-4.5 Tig

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Plot Date: 3-29-2001

- Transit priorities
- Pedestrian infrastructure and facilities
- Bicycle infrastructure and facilities

Of these, people seem more likely to support bus pass programs (not necessarily free), increased transit options, guaranteed ride home programs and shuttle options. Flexible/staggered work hours are attractive to some employers/employees but do not apply to all business in the area, such as retail operations. A people mover system connecting the Mall, Nimbus Business Center and Lincoln Center should concentrate initially on rubber tire alternatives that are flexible and can shift with demand and future development.

Additional possible TDM strategies include further development of the regional carpool matching system and additional cost effective and convenient transit system improvements that make it easier for discretionary riders. There are connectivity issues related to MAX, commuter rail and the more suburban and rural parts of the metropolitan area. Connectivity issues within WSRC, specifically include connecting destinations at Washington Square Mall and the Lincoln Center and Nimbus areas.

Conclusions and Recommendations

The following are based on stakeholder interviews, discussions with regional agencies and past experience in transportation demand management:

- The City of Tigard should implement transportation demand management policies and strategies that reduce Single Occupant Vehicle (SOV) trips and increase use of alternative modes. As the cities of Tigard and Beaverton, and Washington County proceed with their transportation system planning projects, they should incorporate TDM program development into their work programs.
- Beyond the TDM programs, Tigard should continue to facilitate discussions with key stakeholders to determine the viability and level of employer and jurisdictional interest in a TMA program for the entire Regional Center area.
- Pursue TMA funding from Metro. Metro allocates federal flexible funding for TMA start-ups through its bi-annual planning process. Subject to funding availability and interest from other areas of the region, the Washington Square area could be awarded funding of up to \$32,000, with a \$3,000 local match to conduct an exploratory study to refine the potential for and procedures for developing a TMA for the Washington Square area.
- As a complement to the development and implementation of TDM and TMA programs, the City of Tigard should conduct a detailed review of existing and future parking supply and peak period demand as compared to supply (i.e. utilization). As an outcome of this analysis, the City could develop and implement parking code modifications and a parking management plan as necessary to reflect mode split goals for the area.
- Parking management strategies that may be implemented in the area include educating businesses about the true value/cost of parking spaces; facilitating shared use parking (perhaps through a partnership between Tigard and local businesses); encouraging employees to use alternative modes; clustered parking; and preferential parking for carpoolers. In the long-term, parking pricing strategies (e.g., fees for long-term, and short-

- term parking) or new parking structures also could be implemented.
- The City of Tigard, Washington County, Beaverton and employers in the area should actively work with Tri-Met to attain transit improvements in the area. As part of its Regional Center feasibility analysis, Tri-Met identified a series of recommendations for the area that would improve transit service.

4. NATURAL RESOURCES

WETLAND AND HABITAT MAPPING

The report, *Natural Resources Assessment Report*, Mason, Bruce & Girard, Inc., March 12, 2001 addresses the charge to “map and confirm the hydrological characteristics (wetlands and fish habitat) of the Fanno and Ash Creek Watersheds within the Regional Center.” Figure 5 shows the location of vegetation communities within the Regional Center; Figure 6 identifies wetlands.

Conclusions and Recommendations

- Palustrine Emergent Wetlands comprise the majority of the total wetlands in the Regional Center and are primarily associated with the flood plains of Ash and Fanno Creeks. The vegetation in these wetlands is generally free of tree and shrub cover and comprised of herbaceous vegetation: reed canarygrass and other species. These wetlands provide several important functions and values including floodwater storage, groundwater recharge, sediment and nutrient retention and wildlife habitat. Their value for all these functions is considered to be high.
- Palustrine Scrub-Shrub Wetlands are primarily associated with the floodplain of Fanno Creek. This community is characterized by small trees and shrubs, generally intermixed with large open areas dominated by herbaceous vegetation. They function primarily as collectors and conveyors of stormwater; their small size precludes any significant retention of stormwater flows. Their overall value in performing these functions is considered low to moderate. In addition, they likely function more as migration or travel corridors rather than as nesting or resting habit for wildlife. Their overall value as wildlife habitat is considered low to moderate.
- Palustrine Forested Wetlands occupy only small areas within the floodplains of Ash Creek and Fanno Creek. The forested areas are generally discontinuous and occur as small isolated stands separated by the larger emergent wetlands where tree cover is absent. They have a relatively high value for wildlife habitat, riparian cover, noise reduction and aesthetics to the urban environment but provide only limited function for stormwater retention and sediment trapping. The vegetative structure of these wetlands provides shade along streams, lowering overall stream temperatures. The forest structure also provides habitat for various species of wildlife that depend on forested conditions for parts of their life cycles.
- Palustrine Open Water wetlands are characterized by shallow ponds and open water areas within the floodplains of Ash and Fanno Creeks. They include Creekside Marsh in the northwestern portion of the study area just west of Nimbus Drive and several ponds

adjacent to Ash Creek in the southeastern portion of the study area. These wetlands have a relatively high value for wildlife habitat, floodwater storage, groundwater recharge, sediment and nutrient retention, and aesthetics to the urban environment.

- Linear Wetlands include stormwater swales and roadside ditches in developed areas. Most of these have been artificially created to remove stormwater from developed areas. They are considered to have low function and value for stormwater retention, sediment and nutrient retention, groundwater recharge, wildlife habitat and aesthetics.
- Ash Creek and Fanno Creek are the perennial streams within the Regional Center. Both support or supported anadromous runs of winter steelhead trout and chinook salmon species that are listed as threatened under the Federal Endangered Species Act (ESA). Development or other activities that pose fish passage issues and habitat degradation are subject to the jurisdiction of the National Marine Fisheries Service (NMFS).
- Currently, both Ash Creek and Fanno Creek offer poor habitat for fish. Important habitat elements such as large woody debris, cold water temperatures, pool and riffle complexity and quality spawning gravels are absent from both stream systems. No fish were observed in the streams during field studies conducted for this project.

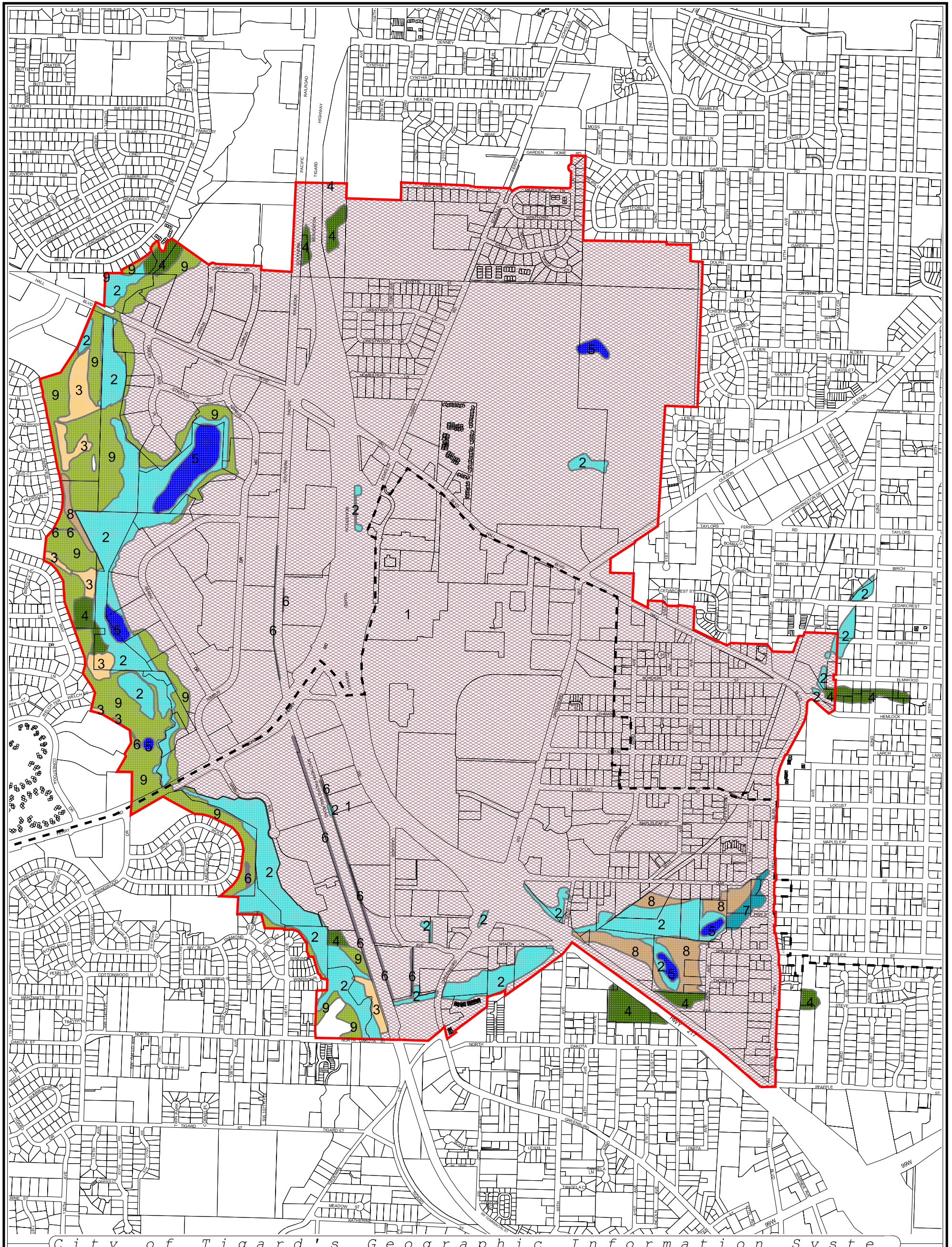


FIGURE 5
Washington Square Regional Center
VEGETATION COMMUNITIES



13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171
Community Development

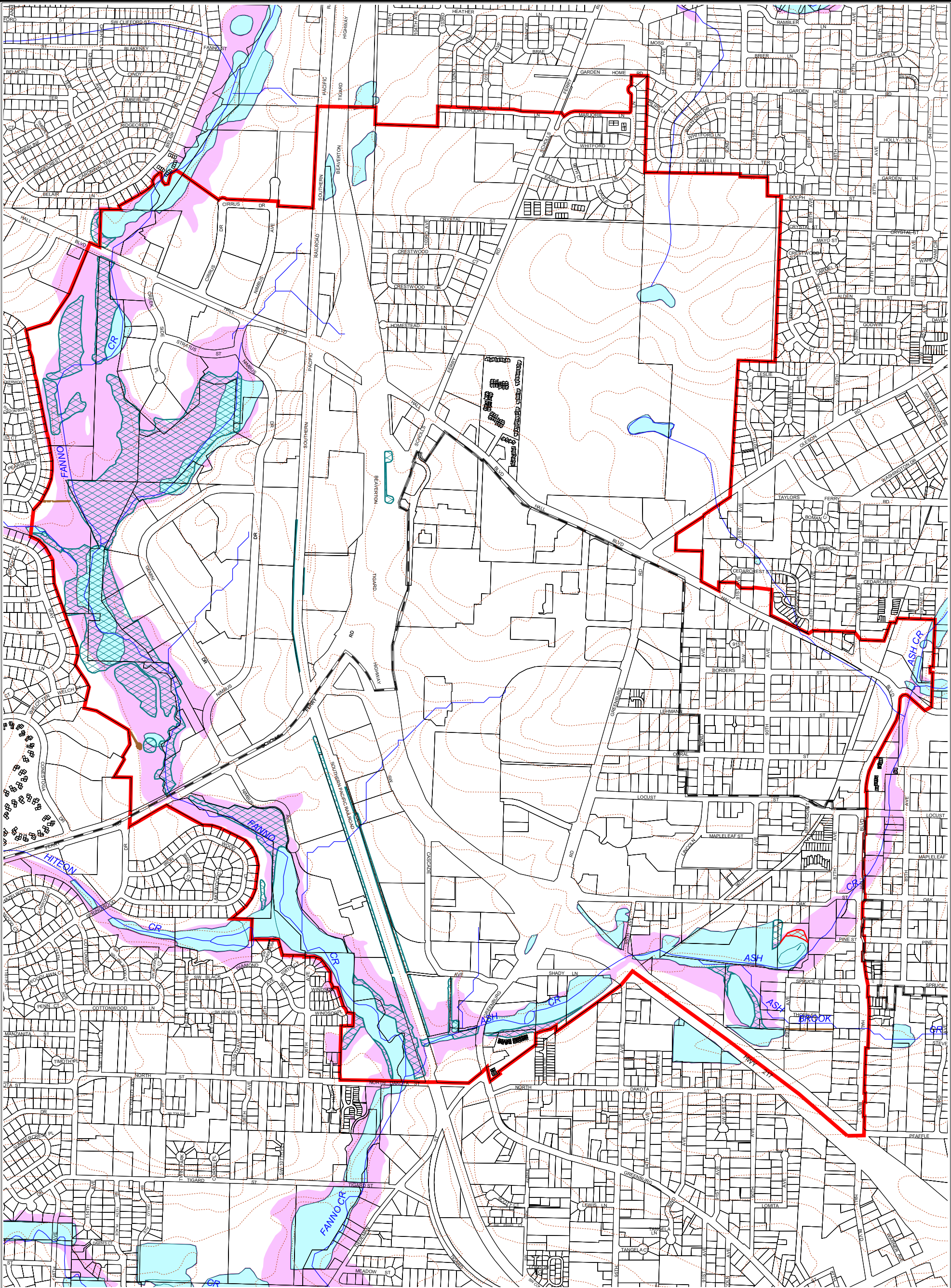
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- Legend**
- Vegetation Communities
- 1 - Developed Urban Area
 - 2 - Palustrine Emergent Wetlands
 - 3 - Palustrine Scrub/Shrub Wetlands
 - 4 - Palustrine Forested Wetlands
 - 5 - Palustrine Open Water Wetlands
 - 6 - Linear Wetlands
 - 7 - Riparian/Aquatic Areas
 - 8 - Agricultural land
 - 9 - Urban Park Land
- Study Boundary
City of Tigard

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Plot date: August 2nd, 2001



City of Tigard's Geographic Information System

FIGURE 6
Washington Square Regional Center
WETLANDS



City of Tigard
13125 SW Hall Blvd.
Tigard, OR 97223
(503) 639-4171

0 400 800 1200 Feet

1"= 900 feet



- Legend**
- 10ft Contours
 - Title 3 Streams
 - Tigard City Limits
 - Study Area
 - Title 3 Wetlands
 - Title 3 100yr Floodplain
- FIELD OBSERVATIONS ***
- Drainage ditch
 - Field-verified as Wetlands
 - To be removed

This map was derived from several data-sources.
The City can not be held responsible for any errors.
Therefore, there are no warranties for this product.

* FIELD OBSERVATIONS FROM JANUARY 2001
BY MASON, BRUCE, & GIRARD INC.

EVALUATE NATURAL RESOURCE POLICIES AND STANDARDS

The report, *Natural Resources Regulations and Development Practices Report*, Spencer & Kupper with Mason, Bruce & Girard, Inc., June 20, 2001 addresses the charges to “compile policies and standards for these watersheds related to development impacts, including the extent that parks and open spaces activities can exist within the 100-year floodplain area” and to “recommend modifications (as necessary) to the City’s natural resource regulations.”

This report first summarizes federal, state and local regulations that apply to both public and private developments near floodplains, wetlands and sensitive stream corridors. These existing regulations protecting natural resources take precedence over any local zoning designations, existing or proposed.

Policies and standards for mixed-use zones designed to implement the Washington Square Regional Center are then summarized, including provisions to provide incentives for new developments adjacent to resource set-back areas to improve adjacent wetlands, fish habitat and floodplains. These requirements have been approved by the Tigard City Council, but full enactment has been postponed pending resolution of the issues noted above.

In addition, a number of Best Management Practices are included, taken from *Natural Resources and Assessment Report*, Washington Square Regional Center Study, Mason, Bruce & Girard, Inc., March, 2001 that describe construction, development and landscaping techniques that can minimize impacts to vegetation communities, fisheries resources and wetlands.

Conclusions and Recommendations

Based on the information in this report and on other technical work completed as part of the Phase II Washington Square Regional Center project, the following conclusions and recommendations are made:

- Existing federal, state and local regulations and impact review procedures applicable to public and private developments within the Regional Center address the protection of identified natural resource areas. If new environmental protection requirements are enacted, particularly for storm water and floodplain protection and the Endangered Species Act, they will apply to the Regional Center.
- These existing regulations and any new ones to protect natural resources take precedence over any local zoning designations, existing or proposed.
- Proposed zoning designations applying to resource areas, particularly Mixed-Use Employment-1 and Mixed-Use Residential-1 designations along Ash Creek east of Highway 217 to Hall Boulevard, and Mixed-Use Employment 2 east of Fanno Creek, do not in and of themselves threaten natural resource values or potentially cause environmental impacts, any more or less significantly compared to existing or less intensive zoning.
- Notwithstanding the findings noted above, modifications to City of Tigard development standards that apply to sites that include natural resource areas along Ash Creek and Fanno Creek are warranted. Development on sites where a 50-foot riparian setback is

required should be subject to development standards that provide a wide range of flexibility, to minimize potential environmental impacts. Applicable development standards include waiving minimum FAR and residential density standards, adjusting building setbacks and others. Standards should be adjusted only when it is demonstrated that the adjustment is the minimum necessary to avoid potential environmental impacts.

- The identification and mapping of wetlands, stream corridors and other features contained in *Natural Resources and Assessment Report*, Washington Square Regional Center Study, Mason, Bruce & Girard, Inc., March, 2001 should be used to update the Tigard Wetlands and Stream Corridors Map.
- The City of Tigard, with Clean Water Services (USA), Washington County, Metro, ODOT, ODF&W and key property owners, should develop a wetland and open space enhancement and mitigation program for the lower Ash Creek corridor from Fanno Creek to Hall Boulevard. The plan should identify improvements within the floodplain, wetlands and stream corridor to enhance endangered species habitat, and improve wetland functional values. It should focus any necessary mitigation activities required within the Regional Center and nearby areas. Funding for the enhancement and mitigation program should utilize a variety of sources, including the following:
 - Require that public and private wetland mitigation activities be undertaken within the area.
 - Pursue funding for acquisition and enhancement through Metro's Greenspaces Fund.
 - Establish a Local Improvement District within the Washington Square Regional Center for stormwater improvements and resource enhancement activities.
 - Create an Urban Renewal District for the Washington Square Regional Center area; and authorize funding for resource enhancement activities.
 - Coordinate with the Parks and Open Space Implementation Strategy to identify improvements appropriate for the area.
 - Pursue regional, state and federal grants for these projects. Provide matching funds from LID revenues and/or urban renewal funds.
 - Incorporate the Best Management Practices outlined in this report into the plan.
 - Develop an on-going maintenance and management plan and funding program.
- Implement the recommendations in the Fanno Creek Watershed Management Plan for the reach of Fanno Creek within the Regional Center. Coordinate with the cities of Tigard and Beaverton, Clean Water Services (USA), and other stakeholders for the following:
 - Pursue funding for acquisition and enhancement through Metro's Greenspaces Fund.
 - Establish a Local Improvement District (LID) within the Washington Square Regional Center for stormwater improvements and resource enhancement activities.
 - Create an Urban Renewal District for the Washington Square Regional Center area, and authorize funding for resource enhancement activities.
 - Coordinate with the Parks and Open Space Implementation Strategy to identify improvements appropriate for the area.
 - Pursue regional, state and federal grants for these projects. Provide matching

- funds from LID revenues and/or urban renewal funds.
 - Incorporate the Best Management Practices outlined in this report into the plan.
 - Develop an ongoing maintenance and management plan and funding program for the area.
- Develop a natural resources mitigation handbook, which incorporates, describes and illustrates the best management practices summarized in the report.

5. STORMWATER MANAGEMENT

The report, *Assessment Report for Stormwater Management*, URS, Inc., June, 2001, identifies the public improvement needs for stormwater quality and quantity, evaluates alternatives and recommends an approach to storm water drainage improvements. This assessment led to the following:

Conclusions and Recommendations

- Stormwater facilities that serve existing developments are generally inadequate to address the water quality and quantity needs in the area; conditions do not meet current standards.
- The Fanno Creek Watershed Management Plan defines a number of stormwater improvements in the Regional Center that address the overall stormwater needs in the area. Funding has not been identified.
- The Regional Center area does not contain adequate or appropriate locations for regional stormwater facilities; thus, new developments are required to provide on-site stormwater improvements.
- New on-site stormwater improvements should be designed so that the post-development peak discharge rate, volume, and pollutant loading to the receiving waters are the same or better as predevelopment values.
- Existing regulations of Clean Water Services (USA), and the cities of Tigard and Beaverton are adequate to assure that new stormwater improvements meet applicable goals.

Based on these conclusions and the findings, the following stormwater management strategy is recommended.

- The City of Tigard, together with Clean Water Services and the City of Beaverton, should develop a stormwater facility upgrade and replacement program designed to improve existing stormwater facilities. Major property owners within the Regional Center should also participate. Funding for the upgrade and replacement program should be focused on local sources, including the following:
 - Establish a Local Improvement District within the Washington Square Regional Center for stormwater upgrade and replacement programs.
 - Earmark 100% of the Stormsewer Service Charge, Water Quality/Quantity Fund and Stormwater Systems Development Charge generated by existing and new developments within the Regional Center to these projects.

- Pursue regional, state and federal grants for these projects.
- Create an urban renewal district for the for the Washington Square Regional Center area. The urban renewal plan should authorize projects to improve existing water quality and flood protection improvements and build new water quality and flood protection projects.
- Implement the stormwater and natural resource enhancement improvements identified in the *Fanno Creek Watershed Master Plan*. Develop a funding program focused on city and regional sources for these projects, including:
 - Clean Water Services (USA) Capital Improvements Projects
 - Local Improvement District
 - Creation of an Urban Renewal District for the Washington Square Regional Center area
 - Regional, state and federal grants.
 - Provide matching funds from LID revenues, and/or urban renewal funds.
- Prepare a stormwater management best practices handbook to be utilized with regulations for new development projects administered by the cities of Tigard and Beaverton and the Clean Water Services (USA). Provide an incentive program for developments and projects that implement innovative stormwater management practices.

6. GREENBELT, PARKS AND OPEN SPACES

The Parks/Open Space Technical Advisory Subcommittee (POSTAS) reviewed background materials including policies, existing parks, natural features and mapping that relates to the Washington Square Regional Center Plan's Greenbelt, Parks and Open Space Concept Plan. The POSTAS also identified opportunities and constraints, missing links, needs and potential projects. Park development criteria helped define various park types and uses. This assessment and recommendations was coordinated with the City of Tigard's Park System Master Plan and the Tualatin Hills Park and Recreation 20-Year Comprehensive Master Plan.

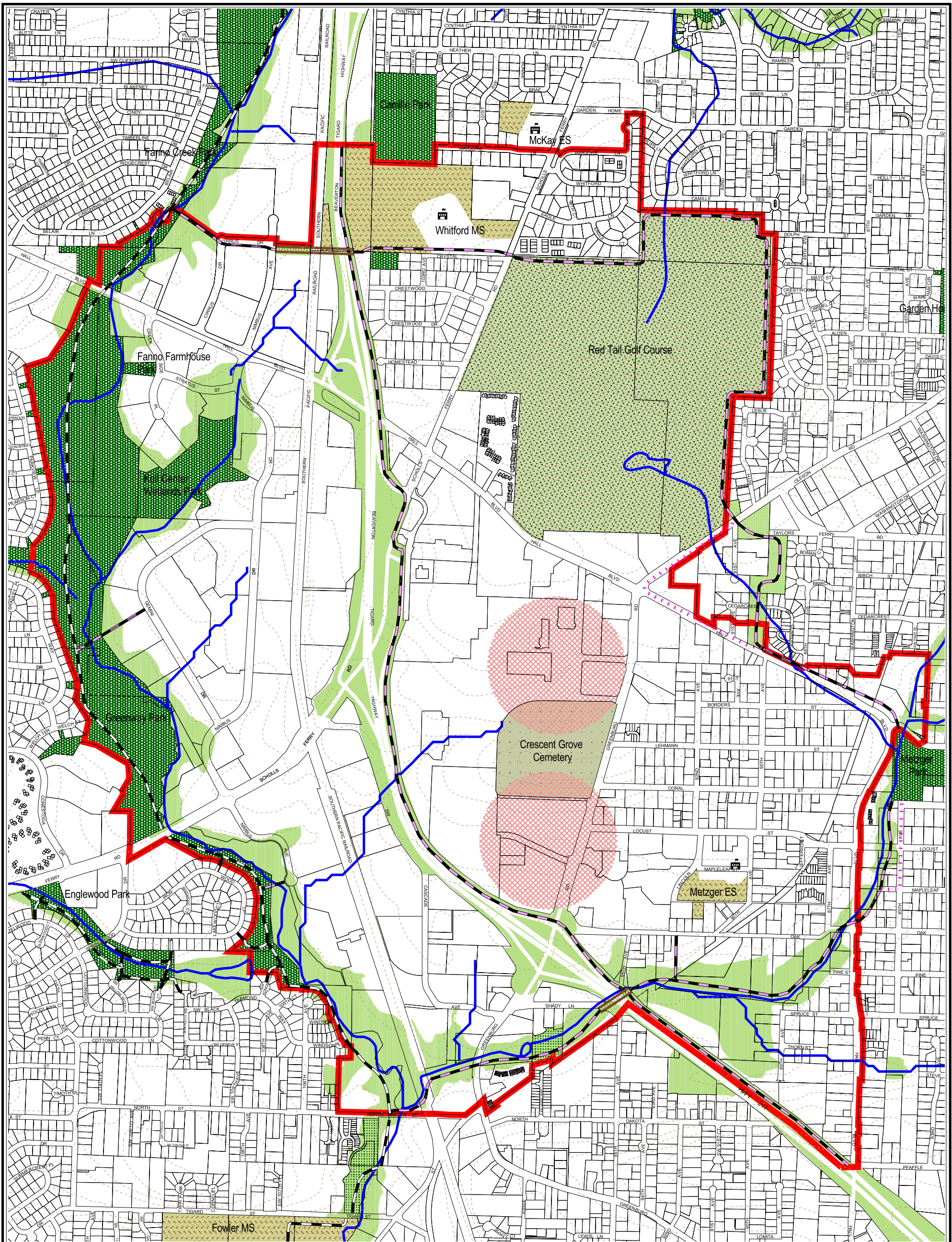
The focus of this work effort was to refine recommendations in the *WSRC Plan* for open space developments, including needs assessment, and preparation of final recommendations for open space preservation, new park identification, and an implementation and financing strategy for needed improvements. The results of this assessment and recommendations are included in the report, *Greenbelt, Parks and Open Space Concept Plan Implementation Strategy*, Lloyd D. Lindley, ASLA, May, 2001.

Conclusions and Recommendations

This *Concept Plan* provides more detail and focus, and builds on the recommendations contained in the *WSRC Plan*. Its primary elements, shown in Figure 7, include:

- A natural greenbelt surrounds nearly the entire regional center. The Fanno and Ash Creek floodplains define its west, south and eastern reaches, while Red Tail Golf Course and Whitford School partially completes the north link. A range of public and private ownerships currently exists.

- A number of missing links and improvements that are needed to complete a continuous greenway.
 - Fanno Creek linear park development: connections from the existing Fanno Creek greenway trail to the Regional Center to the east and to other parks and trails.
 - Ash Creek linear park development: connections along Ash Creek and to the Fanno Creek trail system and Hwy. 217 crossing.
 - Fanno Creek to Red Tail Golf Course: a connection over Hwy. 217 between the Fanno Creek greenway to Whitford School and the Red Tail Golf Course.
 - Red Tail Golf Course Trail: connections through or around the golf course.
 - Oleson Road to Hall Blvd.: connections between Red Tail Golf Course and Hall Blvd.
 - Hall Blvd. to Metzger Park: sidewalk widening and improvements along Hall Blvd. to the park.
- Metzger and Whitford School: improvements to recreation, sports and playground facilities are needed.
- Ash Creek Neighborhood Park: a new neighborhood park east of Greenburg Road.
- Washington Square Urban Open Space: a new urban plaza near the center of the Regional Center.
- Highway 217 Corridor Trail System: a bicycle and pedestrian trail system to provide connections to the greenbelt, enhanced pedestrian streets, bridge crossings and open space facilities.
- Special Parks and Facilities: opportunities exist along the greenbelt and within the Regional Center to create local recreation and interpretive facilities such as an arboretum, butterfly park, community center, swimming pool, tennis facility, skating parks, museums, interpretive facilities and others.
- Implementation of the *Concept Plan* would result in from 20 to 50 new acres of land for parks and open space uses.
- A Parks and Open Space Master Plan as a first step to identify sites and specific improvements for selected uses is needed.



City of Tigard's Geographic Information System

Figure 7
Washington Square Regional Center
**GREENBELT, PARKS, and OPEN SPACE
SYSTEM CONCEPT PLAN**

0 400 800 1200 Feet

1"= 900 feet



Legend

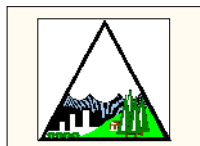
Existing Features

- Park
- Cemetery
- Golf Course
- School
- Open space
- Schools
- Title 3 Streams
- Existing Trails
- Study Area Boundary

Proposed Greenbelt Concept

- Alternate Route
- Future Trail Connection
- Pedestrian Bridge
- Proposed Plaza Areas
- Greenbelt Concept*
- Greenbelt (private ownership)

* Greenbelt consists of land found in the 100yr floodplain and wetland areas.



City of Tigard
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Tigard, OR 97223
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This map was derived from several data-sources.
The City can not be held responsible for any errors.
Therefore, there are no warranties for this product.

7. FINANCIAL STRATEGY

The Washington Square Regional Center Plan and the various reports prepared for this Phase II work effort identify ambitious but workable improvements needed to correct deficiencies in the transportation system. There is also the need to correct existing flooding problems within the area, to anticipate needed improvements related to stormwater quality and quantity in response to the recent listing of several fish species subject to the Endangered Species Act (ESA); and to acquire and improve parks and open spaces.

The report, *Financing Strategy, Washington Square Regional Center*, Spencer & Kupper, June 28, 2001 outlines overall funding recommendations for these needs and priorities. Tables 1, 2 and 3 summarize the improvements recommended for each subject area, costs, overall funding strategy, responsibility and phasing. Generally, cost estimates are in constant 2001 dollars. Funding projections do not account for inflation. Phasing is described as Short-Term (1- 6 years); Medium-Term (7-12 years); and Long-Term (13-20 years).

TRANSPORTATION FINANCING STRATEGY

As noted previously, a Transportation Technical Advisory Subcommittee (TAS) was convened as part of this Phase II effort. The TAS met five times from January 2001 through June 2001 to review the Washington Square Regional Center Plan recommendations, and identify whether or not any of the recommendations were fatally flawed. The group's review was based on evaluation criteria addressing environmental impacts, traffic operations, neighborhood, and alternative mode performance measures. The report, *Project Recommendations, Evaluation and Implementation*, Kittelson & Associates, May, 2001, describes the analysis, conclusions and recommendations from this effort. The following TAS recommendations for transportation funding were adopted by the Task Force.

1. Aggressively pursue transportation funding, including the Highway Trust Fund, state and local sources, and Metro's Metropolitan Transportation Improvement Program (MTIP). Earmark these funds for major transportation improvements that benefit the entire Regional Center.
2. Establish priorities so that locally generated transportation-related fees from existing businesses and residents and new development activity located within the Regional Center pay for transportation needs within the Regional Center.
3. Pursue the formation of local improvement district(s) (LIDs) where existing businesses and residents directly benefit from improvements to existing transportation facilities, or relatively modest new improvements are needed that benefit several property owners.
4. Seriously consider the formation of an urban renewal district for the Regional Center as a local funding source for major transportation improvements that benefit the entire area. Utilize this funding to leverage other significant sources.

5. Maintain development approval practices that require new developments to pay for or provide transportation improvements in a manner proportional to their impacts on the local transportation system.

The following table summarizes possible results from this transportation financing strategy:

| | |
|---|------------------------------|
| Total Unfunded Transportation Improvements | \$115.7-121.7 million |
|---|------------------------------|

Sources:

| | |
|----------------------------------|----------------------------|
| MTIP (Federal Funding) | \$43.7-65.6 million |
| State Gas Tax | 3.9 million |
| Local Transportation Impact Fees | \$10.6 million |
| Local Improvement District | \$7.0-10.0 million |
| Urban Renewal Program | <u>\$46.5-81.0 million</u> |

| | |
|---|-----------------------|
| Total Transportation Resources Available (20 yrs) | \$111.7-171.1 million |
|---|-----------------------|

STORMWATER MANAGEMENT & NATURAL RESOURCE ENHANCEMENT FINANCING STRATEGY

The *Washington Square Regional Center Plan* identifies a number of natural resources, open space and stormwater issues; and the need for a funding strategy to implement the Plans. The Phase II work effort assembled technical expertise in the areas of natural resource assessment and stormwater management, and created a Natural Resources Technical Advisory Subcommittee (NRTAS) and a Stormwater Technical Advisory Subcommittee (SWTAS) to evaluate issues and prepare recommendations for the Task Force. Issues identified by the City Council in its assessment include storm water management needs related to quantity and quality and existing flood problems within the area; and the need to adequately protect and enhance the natural resources found within the Regional Center, notably the Fanno Creek and Ash Creek floodplains.

The report, *Natural Resources Regulations and Development Practices*, Spencer & Kupper/Mason, Bruce and Girard, Inc., June, 2001, describes the findings and recommendations related to natural resource protection and enhancement. *Assessment Report for Stormwater Management*, URS, Inc., June, 2001 identifies the public improvement needs for stormwater quality and quantity, evaluates alternatives and recommends an approach to stormwater drainage improvements. Recommendations for funding follow.

1. Establish protocols that focus locally generated stormwater and water quality-related fees from existing businesses and residents and new development activity within the Regional Center on the water quantity and quality needs within the Regional Center. Two existing local funding sources should be targeted for this strategy. The City of Tigard and Clean Water Services (formerly USA) collect monthly storm sewer service charges from businesses and some residential developments within the service area. Tigard also collects a storm water systems development charge (SDC).

2. Pursue the formation of local improvement district(s) (LIDs) where existing businesses and residents will directly benefit from improvements to existing stormwater facilities, or relatively modest new improvements are needed that benefit several property owners.
3. Establish an urban renewal district for the Regional Center as a local funding source for major improvements that benefit the entire area, including stormwater, water quality and natural resource protection. Utilize urban renewal funding to leverage other significant funding sources.

In summary, based on the stormwater management and natural resource enhancement financing strategy outlined above, the following program results:

Total Stormwater/Resource Improvements \$15.2-18.0 million

Sources:

| | |
|----------------------------|---------------------------|
| Stormwater Service Charge | 6.0 million |
| Local Storm Sewer SDC | \$1.2 million |
| Local Improvement District | \$3.0-5.0 million |
| Urban Renewal Program | <u>\$9.3-16.4 million</u> |

Total Resources Available (20 yrs) \$19.5-28.6 million

GREENBELT, PARKS AND OPEN SPACE FINANCING STRATEGY

As part of the Washington Square Regional Center Phase II Work Effort, a Parks/Open Space Technical Advisory Subcommittee (POSTAS) reviewed background materials including policies, existing parks, natural features and mapping that relates to the Washington Square Regional Center Plan's Greenbelt, Parks and Open Space Concept Plan. The focus of this work effort was to refine recommendations made in the WSRC Plan for open space preservation, new park identification, and an implementation and financing strategy for needed improvements. The results of this assessment and recommendations are included in the report, *Greenbelt, Parks and Open Space Concept Plan Implementation Strategy*, Lloyd D. Lindley, ASLA, May, 2001.

The primary elements of a Washington Square Regional Center greenway, parks and open space funding strategy are:

1. Establish protocols that focus locally generated parks and open space-related fees from existing businesses and residents and new development activity within the Regional Center on the parks and open space needs within the Regional Center.
2. Pursue funding from the Metro Greenspaces Fund to acquire open space along Ash and Fanno Creeks.

3. Develop a coordinated fund-raising program involving the cities of Tigard and Beaverton, Washington County, Tualatin Hills Parks and Recreation District (THPRD), and Metro to aggressively pursue a wide variety of funding opportunities.
4. Establish an urban renewal district for the Regional Center as a local funding source for major improvements that benefit the entire area, including greenbelt, parks and open space acquisition and improvements. Utilize urban renewal funding to leverage other significant funding sources.

In summary, based on the greenbelt, parks and open space financing strategy outlined above, the following program results:

Total Greenway, Parks and Open Space Improvements \$13.1-20.9 million

Sources:

| | |
|--|---------------------------|
| Local Parks SDC | \$2.5 million |
| Metro Greenspaces Fund | \$1.0-2.0 million |
| Targeted Fund-Raising | \$1.0-2.0 million |
| Urban Renewal Program | <u>\$9.3-16.2 million</u> |
| Total Resources Available (20 yrs) | \$13.8-22.7 million |

RETURN ON PUBLIC INVESTMENT

The Washington Square Regional Center currently contains one of the state's largest and most successful retail districts in the Washington Square Mall and a concentration of office and light industrial employment supporting over 18,000 jobs. About 5,000 people live within the Regional Center boundaries. During the next 20 years, growth in office and retail employment is expected to add an additional 9,800 jobs; and 1,500 new housing units will accommodate an additional 2,500 people. With future employment of about 27,800 and housing for 7,500 residents, the Washington Square Regional Center is second only to Portland's Central City as a retail/employment center; in fact, it is larger than most cities in Oregon.

The vision for the Regional Center outlined in the *WSRC Plan* calls for a dynamic, compact and interconnected community:

- A vital Regional Center serving the needs of Washington County residents
- Where stable residential neighborhoods are preserved
- Innovative transportation services are offered that make it easy for people to reach their destinations
- Washington Square Mall is a focus and a community resource
- A linked greenbelt of parks and open spaces is easily reached by residents and employees

This financing strategy report identifies more than \$160 million in transportation, stormwater, parks and open space improvements needed to support existing businesses and residences in the area, and to preserve the livability for the Regional Center's future. In fact, many of the recommended transportation and other infrastructure improvements described in the *WSRC Plan* and summarized in this report are necessary to address existing needs and deficiencies, not just the impacts caused by growth. Achieving this vision will require significant commitment and investments from both the private and public sectors. Public investments in the Regional Center are needed in order to address current deficiencies and to provide for future growth.

The current assessed value of retail, employment and housing in the Regional Center is about \$850 million. Another \$400-600 million, in current dollars, in assessed value will be added due to for growth during the next 20 years. When fully realized, the Washington Square Regional Center will have almost \$1.4 billion in assessed value. This represents about \$9 in private investment value for every \$1 in transportation and infrastructure investment, assuming this financing strategy is implemented.

It should be noted, however, that achieving the full vision described above is dependent on making the public and private investments that form the "cost" side of this financing strategy. In particular, if key transportation investments such as improvements to Hwy. 217, transit, and streets that more effectively connect the sub-districts within Regional Center are not made, existing traffic congestion will continue to worsen to the point that private investment may seek opportunities elsewhere.

To retain and enhance the Washington Square Regional Center as one of the most significant and important areas in Oregon, public investment of approximately \$160 million over the next 20 years is needed to support:

- 18,000 existing and 9,800 new jobs
- A resident population of about 7,500 people
- Countless shoppers and merchants that are attracted to the area
- A compact urban center surrounded by a greenbelt
- An assessed value of approximately \$1.4 billion

Details of this recommended financial strategy follow.

Table 1
Washington Square Regional Center
June, 2001

TRANSPORTATION IMPROVEMENTS

| Project Description | Costs (1000 \$) | Financing Strategy | Jurisdiction | Phasing |
|---|-----------------|---|--------------------|------------------|
| TRANSPORTATION IMPROVEMENTS | | | | |
| Non-Auto Modes-Regional | | | | |
| Commuter Rail Service and Station* | NA ¹ | Financing Strategy already in place: State Lottery Funds-\$35m requested County/City MSTIP-\$25 m Federal New Rail Starts Prog.-\$25m+ | WC, TM, T,B | Short Range |
| Non-Auto Modes-Local Regional Center | | | | |
| Washington Square Mall Pedestrian Access Improvements* | NA | New development responsibilities MRTP Funding | T, M | Short- Medium |
| Transit Center Improvements* | NA | Tri Met; Urban Renewal Program | TM, T, M | Short- Medium |
| SW Greenburg Rd. Pedestrian Refuge | 30-50 | Local Improvement District Urban Renewal Program | WC, M, T | Short |
| SW Hall Blvd. Pedestrian Refuge* | 40-80 | State highway responsibility. Would be included in Hall Blvd. widening projects. MRTP Funding, LID, Urban Renewal | ODOT, M | Short |
| SW Locust St. Bike/Ped. Improvements | 30-45 | Local Improvement District Urban Renewal Program | WC, M, T | Short |
| People Mover | NA | Tri Met. Roadway system provided as part of street improvement recommendations. | WC, TM, M, T, B | Medium- Long |

Key: WC=Washington County, TM=Tri-Met, T=Tigard, B=Beaverton, M=Metro, ODOT=Oregon Department of Transportation

¹ Project funded separately.

Table 1 (Continued, pg. 2)

| Project Description | Costs (1000 \$) | Financing Strategy | Jurisdiction | Phasing |
|---|-----------------|--|---------------|--------------|
| TRANSPORTATION IMPROVEMENTS | | | | |
| Auto Modes-Regional | | | | |
| Highway 217 Improvements* | NA | Federal and state highway funds. Part of a freeway corridor improvement program from I-5 to Hwy. 26. | ODOT, M | Medium-Long |
| Auto Modes-Local Regional Center | | | | |
| North: Mall to Nimbus Connection-Options A & B* | 30,000 | MRTP Funds, Urban Renewal Program | T, B, M, ODOT | Medium |
| SW Nimbus Avenue North of Scholls Ferry Rd. | NA | Included in City of Beaverton TSP. Local improvement district Transportation impact fees | B | Short |
| SW Nimbus-Greenburg Connection* | 38,000 | MRTP Funds, Urban Renewal Program | T, M | Medium |
| South: Mall to Nimbus Connection | 26,000 | MRTP Funds, Urban Renewal Program | T, B, M, ODOT | Medium |
| SW Lincoln Street (Locust to Oak) | 3,000 | Local improvement district Transportation impact fees | T | Short-Medium |
| SW Hall Boulevard Widening* | | State of Oregon, MRTP Funds, Urban Renewal Program | ODOT, M | Long |
| Three Lanes | 18,000 | | | |
| Five Lanes | 24,000 | | | |
| SW Locust Street (Hall to Greenburg) | 40-55 | Local Improvement District, Urban Renewal Program, Transportation Impact Fees | T, WC | Short |

Key: WC=Washington County, TM=Tri-Met, T=Tigard, B=Beaverton, M=Metro, ODOT=Oregon Department of Transportation

Table 1 (Continued, pg. 3)

Table 1 (Continued, pg. 5)

| Project Description | Costs (1000 \$) | Financing Strategy | Jurisdiction | Phasing |
|--|----------------------|--|--------------|--------------|
| TRANSPORTATION IMPROVEMENTS | | | | |
| Near Term Traffic Operations Improvements | Cost varies. Say 500 | Local improvement district Transportation impact fees | T, WC | Short-Medium |
| Signal timing on SW Greenburg Rd. | | | | |
| EB turn lane from SW Hall to Scholls Ferry Rd. | | | | |
| District-wide pedestrian improvements | | | | |
| Shuttle system | | | | |
| SB turn lane on SW Hall at Palmblad Ln. | | | | |
| Auto Modes-New Development Responsibilities | | | | |
| Washington Square Internal Roads* | Varies | New development responsibilities Local improvement district | T | Short-Medium |
| SW Cascade Avenue | Varies | New development responsibilities Local improvement district | B | Short-Medium |
| SW Oak Street Improvements (SW Hall to Lincoln) | 40-55 | New development responsibilities Local improvement district | T | Short-Medium |
| | | | | |
| | | | | |
| Total Unfunded Transportation Improvements | 115,680-121,680 | | | |

Key: WC=Washington County, TM=Tri-Met, T=Tigard, B=Beaverton, M=Metro, ODOT=Oregon Department of Transportation

* Project on 2000 Metro Regional Transportation Plan (MRTP)

Table 2
Washington Square Regional Center
June, 2001

STORMWATER MANAGEMENT & RESOURCE ENHANCEMENT IMPROVEMENTS

| Project Description | Costs (1000 \$) | Financing Strategy | Jurisdiction | Phasing |
|--|-----------------|--|--------------|--------------|
| STORMWATER MANAGEMENT & RESOURCE ENHANCEMENT IMPROVEMENTS | | | | |
| Existing Facility Upgrade And Replacement Program | | | | |
| Upgrade residential area north of Oak | 2,500-3,500 | Service Charge Dedications Stormwater SDC | T, WC | Short-Medium |
| Upgrade/replacement for other areas | 1,000-2,000 | Local Improvement District | T, B | Medium |
| Demonstration project | 230 | Urban Renewal Program | T, WC | Short |
| Regional Center Stormwater Improvements ¹ | | | | |
| Ash Creek Middle Fork-Park Place to Cedarcrest Rd | 130 | Service Charge Dedications Stormwater SDC | T, WC | Short-Medium |
| Ash Creek-Hall to Metzger | 168 | Local Improvement District | | |
| Ash Creek-Confluence to Highway 217 | 365 | Urban Renewal Program | | |
| Ash Creek-Phase 2 Washington Square Pre-Treat. | 250 | | | |
| Regional Center Resource Enhancement Improvements ¹ | | | | |
| Ash Creek-Highway 217 to Hall Blvd. ² | 2,350 | Urban Renewal Program | T | Medium-Long |
| Fanno Creek-Engle Wood Park Enhancement ³ | 2,800 | | T, B | |
| Best Practices Handbook | 30 | Urban Renewal Program | T | Short |
| Incentive Program for Innovative Stormwater Mgmt. | | | | |
| Handbook | 30 | Service Charge Dedications | T | Short |
| Incentives/Grants | 1,000 | Urban Renewal Program | T, B, WC | Short-Medium |
| Sub-total Construction | 10,853-12,853 | | | |
| Total Stormwater/Natural Resource Program | 15,200-18,000 | | | |

Key: WC=Washington County, T=Tigard, B=Beaverton

¹ Source: Fanno Creek Watershed Master Plan

² Includes the removal and redistribution of fill to increase flood storage within the Ash Creek floodplain and planting of native vegetations. Includes master plan preparation.

³ Includes enhancement of the existing pond by planting native vegetation, enhancing and creating wetlands, sloping the stream banks and stabilizing the streambed. Includes master plan preparation.

Table 3
Washington Square Regional Center
June, 2001

GREENWAY, PARKS AND OPEN SPACE SYSTEM IMPROVEMENTS

| Project Description | Costs (1000 \$) | Financing Strategy | Jurisdiction | Phasing |
|--|----------------------|--|--------------|--------------|
| PARKS AND OPEN SPACE SYSTEM IMPROVEMENTS | | | | |
| Parks & Open Space Master Plan | 250 | Parks SDC | T, B, M | Short |
| Fanno Creek Linear Park Development¹ | 425-700 | Parks SDC Metro Greenspaces Program | T, B, M, WC | Short-Medium |
| Ash Creek Linear Park Development² | 1,710-2,850 | Parks SDC Metro Greenspaces Program Urban Renewal Program | T, M | Short-Medium |
| Greenway Trail Connections | | | | |
| Fanno Creek to Red Tail Golf Course | 838-1,234 | Parks SDC Urban Renewal Program | B, WC | Medium-Long |
| Red Tail Golf Course Trail | 245-555 | | T, B, WC | |
| Oleson Road to Hall Blvd. ³ | 345-1,540 | | T, WC | |
| Hall Blvd. to Metzger Park | 150-275 | | T, WC | Short |
| Metzger School Improvements | 150 | Parks SDC, School District Urban Renewal Program | T, SD | Short |
| Whitford School Improvements | 150 | | T, SD | |
| Ash Creek Neighborhood Park⁴ | 755-1,585 | Parks SDC, Private Urban Renewal Program | T | Short-Medium |
| Washington Square Urban Open Space⁵ | 7,675-10,645 | | T | Medium-Long |
| Highway 217 Corridor Trail System | 240-790 | Complete as part of Hwy. 217 widening improvements. | ODOT | Medium-Long |
| Special Parks and Facilities⁶ | 175 | Parks SDC, Urban Renewal Program, Targeted Fundraising, Private | T, B, WC | Medium |
| | | | | |
| Total Parks & Open Space Improvements | 13,108-20,899 | | | |

Key: WC=Washington County, T=Tigard, B=Beaverton, M=Metro, ODOT=Oregon Department of Transportation, SD=School District

¹ Assumes property acquisition of from 5-10 acres

² Assumes property acquisition of from 2.25 to 21.0 acres.

³ Higher cost assumes property acquisition of 6-8.5 acres.

⁴ Assumes property acquisition of 6 acres.

⁵ Assumes property acquisition of 4 acres.

⁶ Special Parks and Facilities will be funded by specific fund-raising activities associated with individual improvement proposals.

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